APPENDIX A

ELK CORPORATION OF DALLAS

v.

GAF BUILDING MATERIALS CORPORATION, Building Materials Corporation of America, Building Materials Corporation of America d/b/a/ GAF Materials Corporation, and GAF Materials Corporation

No. 98-1369

United States Court of Appeals,
Federal Circuit.

168 F.3d 28

February 11, 1999

Manufacturer of roofing shingles brought action against competitors, alleging infringement of design patent. Competitors counterclaimed, alleging that patent was unenforceable due to inequitable conduct. The United States District Court for the Northern District of Texas, Jorge A. Solis, J., held patent unenforceable, and manufacturer appealed. The Court of Appeals, Plager, Circuit Judge, held that manufacturer's failure to disclose to Patent and Trademark Office (PTO) two prior art patents was inequitable conduct that rendered patent unenforceable.

Affirmed.

1. Patents 97

Applicants for patents, including their patent attorneys, are required to prosecute patent applications in the Patent and Trademark Office (PTO) with candor, good faith, and honesty, and breach of this duty may constitute inequitable conduct. 37 C.F.R. § 1.56.

2. Patents 97

Inequitable conduct due to failure to disclose material information must be proven by clear and convincing evidence of: (1) prior art that was material; (2) knowledge chargeable to an applicant of that prior art and of its materiality; and (3) failure of the applicant to disclose the art resulting from an intent to mislead the Patent and Trademark Office (PTO).

3. Patents 97

Proof of inequitable conduct before the Patient and Trademark Office (PTO) may be rebutted by a showing that: (1) the prior art was not material; (2) if the prior art was material, a showing that the applicant did not know of that art; (3) if the applicant did know of that art, a showing that the applicant did not know of its materiality; or (4) a showing that the applicant's failure to disclose the art did not result from an intent to mislead the PTO.

4. Patents 324.54, 324.55(2)

Because inequitable conduct before the Patent and Trademark Office (PTO) is an equitable issue committed to the discretion of the district court, Court of Appeals reviews a determination of inequitable conduct for abuse of discretion;

Court of Appeals may reverse a district court's decision on inequitable conduct only if the decision is based upon clearly erroneous findings of fact or on a misapplication or misinterpretation of applicable law, or evidences a clear error of judgment on the part of the district court.

5. Patents 324.55(2)

District court's factual determinations of materiality and intent, on issue of alleged inequitable conduct before the Patent and Trademark Office (PTO), are subject to the clearly erroneous standard and will not be disturbed unless Court of Appeals has a definite and firm conviction that a mistake has been committed.

6. Patents 97

Design patent applicant's failure to disclose to Patent and Trademark Office (PTO) two prior art patents was inequitable conduct that rendered patent unenforceable; prior art patents were material and not cumulative of other prior art presented to PTO, and evidence indicated that applicant had knowledge of such materiality and had intent to deceive PTO.

7. Patents 97

Information is "material," such that it must be disclosed to Patent and Trademark Office (PTO) by patent applicant, when there is a substantial likelihood that a reasonable examiner would have considered the information important in deciding whether to allow the application to issue as a patent; however, an otherwise material reference need not be disclosed if it is merely cumulative of or less material than other references already disclosed.

See publication Words and Phrases for other judicial constructions and definitions.

8. Patents 97

Intent to deceive Patent and Trademark Office (PTO) need not, and rarely can, be proven by direct evidence, for purpose of inequitable conduct claim; rather, this element of inequitable conduct must generally be inferred from the facts and circumstances surrounding the applicants' overall conduct.

John D. Murnane, Baker & Botts, L.L.P., of New York, New York, argued for plaintiff-appellant. With him on the brief were Arthur S. Tenser, Robert Neumer and Neil P. Sirota. Also on the brief was Larry D. Carlson, Baker & Botts, L.L.P., of Dallas, Texas.

Samuel D. Rosen, Paul, Hastings, Janofsky & Walker, of New York, New York, argued for defendants-appellees. With him on the brief was Brendan J. O'Rourke. Also on the brief was Charles A. Gall, Jenkins & Gilchrist, of Dallas, Texas.

Before MICHEL, PLAGER, and RADER, Circuit Judges.

PLAGER, Circuit Judge.

The question in this design patent case is whether U.S. Patent No. Des. 344,144 (the '144 patents) is unenforceable due to inequitable conduct in its prosecution. The district court so

held.[1] Because the district court did not abuse its discretion in holding the '144 patent unenforceable, we affirm.

BACKGROUND

Elk Corporation of Dallas (Elk) brought a patent infringement action against defendants, GAF Building Corporation of America, Building Materials Corporation of America, Building Materials Corporation of America d/b/a GAF Materials Corporation, and GAF Materials Corporation (collectively, GAF), alleging that GAF infringed Elk's '144 patent. GAF counterclaimed by filing for a declaratory judgment that Elk's design patent is unenforceable due to inequitable conduct by the patent applicants and their patent attorney in the prosecution of the patent.

Elk and GAF are manufacturers of roofing shingles. In 1975, GAF obtained a patent, U.S. Patent No. 3,921,358 (the Bettoli patent), for two-ply, composite roofing shingles which are often referred to as "laminated shingles." GAF granted licenses under the Bettoli patent to many manufacturers, including Elk, to manufacture and sell two-ply, composite roofing shingles. In the late 1980s four inventors, some of whom were Elk employees, began developing a two-ply, composite rooking shingle based on the Bettoli patent that utilized striations of shading to simulate the appearance of slate shingles.

In anticipation of applying for a design patent on the new shingle, Casimir Weaver, one of the inventors, arranged for a

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[1] *Elk Corp. v. GAF Bldg. Materials Corp.*, No. 3:94-CV-0249-P (N.D. Tex. Apr. 17, 1998).

patentability search on the newly developed roofing shingle. In his letter requesting the search, Mr. Weaver acknowledged the similarity of the new design to the shingles disclosed in the Bettoli patent:

> The enclosed sketch describes this [new] product's appearance. This shingle's construction is similar to the one described in Bettoli's patent No. 3,921,358 which is also enclosed.

A search was made and Mr. Weaver was sent a search report. One of the patents discussed in the search report was U.S. Patent No. 2,036,329 (the Giles patent). After reviewing the search report, Mr. Weaver wrote a memo to a co-inventor pointing out that the Giles patents was "[o]f special interest." The search report and Mr. Weaver's memo were forwarded to a patent attorney at Baker & Botts, L.L.P.[2]

During the prosecution of the '144 patent, a number of prior art patents covering different shingles or parts of shingles, including U.S. Patent. No. Des. 309,027 (the Noone patent), U.S. Patent No. 3,613,328 (the Morgan patent), and U.S. Patent. No. 2,253,652 (the Ritter patent), were disclosed to the Patent and Trademark Office (PTO). Neither the Noone patent, the Morgan patent, nor the Ritter patent made mention of either the Bettoli patent or the Giles patent. The Bettoli and Giles patents, themselves, were never disclosed to the PTO despite the fact that it was the standard practice of the patent attorney who completed the prosecution of the '144 patent to disclose all of the prior art cited in a search report. In contrast, during the

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[2] Elk's '144 patent was initially prosecuted by Roy Van Winkle. When Mr. Van Winkle retired, Thomas Felger assumed responsibility.

prosecution of a continuation of the '144 patent, both the Bettoli and Giles patents were disclosed to the PTO.

In its counterclaim, GAF alleged that the applicants had committed fraud on the PTO by various means, including by intentionally withholding the Bettoli and Giles patents and by proffering arguments to the examiner during the prosecution of the '144 patent that could not have been made had the Bettoli and Giles patents been disclosed. In addition, GAF alleged that the applicants had intentionally withheld their knowledge of a commercialized Bettoli-type shingle known as the GS High Sierra. The district court found, *inter alia*, that the Bettoli and Giles patents and information about the GS High Sierra were material, that the applicants had knowledge of the materiality of the patents and information, and that they withheld the patents and information from the PTO with an intent to deceive. *See Elk Corp. v. Building Materials Corp.*, No. 3:94-CV-0249-P, slip op. at 10, 14, 27-28, 1997 WL 796004 (N.D. Tex. Oct. 10, 1997). In addition, the district court found that in order to overcome an initial rejection the applicants had made arguments concerning the prior art cited by the examiner that could not have been made had they disclosed the far more material Bettoli and Giles patents. *See id.* at 20. In light of all the circumstances, the district curt concluded that the applicants' conduct was so culpable that Elk's '144 patent should not be enforced. *See id.* at 28. Elk appeals the district court's final judgment against it.

DISCUSSION

[1] Applicants for patents, including their patent attorneys, are required to prosecute patent applications in the PTO with candor, good faith and honesty. *See Molins PLC v. Textron, Inc.*, 48 F.3d 1172, 1178, 33 USPQ2d 1823, 1826 (Fed. Cir.

1995); *see also* 37 C.F.R. § 1.56. A breach of this duty may constitute inequitable conduct. Although the district court considered multiple allegations that the applicants had breached their duty of candor, we focus on the most pertinent allegations - those that involve the withholding of the Bettoli and Giles patents.

[2, 3] In equitable conduct due to failure to disclose material information must be proven by clear and convincing evidence of: (1) prior art that was material; (2) knowledge chargeable to an applicant of that prior art and of its materiality; and (3) failure of the applicant to disclose the art resulting from an intent to mislead the PTO. *See Molins*, 48 F.3d at 1178, 33 USPQ2d at 1827; *FMC Corp. v. Manitowoc Co.*, 835 F.2d 1411, 1415, 5 USPQ2d 1112, 1115 (Fed. Cir. 1987). Such proof of inequitable conduct may be rebutted by a showing that: (a) the prior art was not material; (b) if the prior art was material, a showing that the applicant did not know of that art; (c) if the applicant did know of that art, a showing that the applicant did not know of its materiality; or (d) a showing that the applicant's failure to disclose the art did not result from an intent to mislead the PTO. *See id.*

[4, 5] Because inequitable conduct is an equitable issue committed to the discretion of the district curt, we review a determination of inequitable conduct for abuse of discretion. *See Kingsdown Med. Consultants, Ltd. v. Hollister, Inc.*, 863 F.2d 867, 876, 9 USPQ2d 1384, 1392 (Fed. Cir. 1988) (en banc). We may reverse a district court's decision on inequitable conduct only if the decision is based upon "clearly erroneous findings of fact or on a misapplication or misinterpretation of applicable law, or evidences a clear error of judgment on the part of the district court." *Id.*; *Molins*, 48 F.3d at 1178, 33 USPQ2d at 1827. The district court's factual

determinations of materiality and intent are subject to the clearly erroneous standard and will not be distributed unless this court has a "definite and firm conviction that a mistake has been committed." *Id.*

[6] On the question of whether the prior art Bettoli and Giles patents were material, Elk argues that the district court erred in finding the Bettoli and Giles patents material because they were merely cumulative of certain patents that were disclosed to the PTO during the prosecution of the '144 patent. According to Elk, the Bettoli patent was merely cumulative of the Morgan and Noone patents, and the Giles patent was merely cumulative of the Ritter and Noone patents.

[7] Information is "material" when there is a substantial likelihood that a reasonable examiner would have considered the information important in deciding whether to allow the application to issue as a patent. *See Molins*, 48 F.3d at 1179, 33 USPQ2d at 1827. However, an otherwise material reference need not be disclosed if it is merely cumulative of or less material than other references already disclosed. *See Halliburton Co. v. Schlumberger Technology Corp.*, 925 F.2d 1435, 1440, 17 USPQ2d 1834, 1839 (Fed. Cir. 1991); *Baxter Int'l, Inc. v. McGaw, Inc.*, 149 F.3d 1321, 1328, 47 USPQ2d 1225, 1229 (Fed. Cir. 1998).

Differences between the Bettoli patent and the Morgan and Noone patents support the district court's finding that the Bettoli patent was material. For instance, the Morgan patent, which predates the Bettoli patent, disclosed a different type of shingle, a single-ply, strip shingle, than the two-ply, composite shingle disclosed in the Bettoli patent. In addition, the Noone patent, a design patent covering the ornamental design for only the tab portion of a single-ply strip shingle, could not be

cumulative of the Bettoli patent which describes an entire two-ply composite shingle. Because the Morgan and Noone patents disclose a different shingle, the Bettoli patent is not cumulative of those patents. In addition, the Bettoli patents is not less material than the Morgan or Noone patents because the design claimed in the '144 patents is for a two-ply, composite shingle, not a single-ply, strip shingle. Thus, the district court did not clearly err in finding that the Bettoli patent was the most material prior art and that the Bettoli patent was not cumulative of the Morgan and Noone patents which were cited to the PTO.

Similarly, differences between the Giles patent and the Ritter and Noone patents support the district court's finding that the Giles patent was material. The Giles patent discloses shingles with blended horizontal shadings across each simulated shingle, whereas the Ritter patent discloses a discrete, continuous dark line across the tops of shingles. The Noone patent is also different from the Giles patent because it teaches discrete vertical zones of shading. Thus, because neither the Noone patent nor the Ritter patent discloses the same shading as the Giles patent, the Giles patent cannot be cumulative of those patents. In addition, the Giles patent is not less material than the Ritter or Noone patents because the design claimed in the ''144 patent for laminated shingles with three horizontal striations that appear to blend into each other across a simulated shingle is more similar to the blended shading of shingles in the Giles patent than the shadings in the Ritter or Noone patents. Thus, the district court did not clearly err in finding that the Giles patent was material and was not cumulative of the Ritter and Noone patents which were cited to the PTO.

Besides the prior art disclosed to the PTO, the district court also considered other circumstances relating to the materiality of the Bettoli and Giles patents and the applicants' knowledge

of those patents. With respect to the Bettoli patent, there was evidence that the applicants' new shingle design was an improved Bettoli-type laminated roofing shingle; that Mr. Weaver's letter, requesting a search report, revealed that the applicants knew that the new shingle was very similar to the shingle disclosed in the Bettoli patent; and that the testimony of the prosecuting attorney indicated that there was a strong likelihood the prosecuting attorney also knew of the materiality of the Bettoli patent. These factors further support the district court's findings of the high level of materiality of the Bettoli patent and the applicants' knowledge of that materiality.

With regard to the Giles patent, additional support for the district court's findings of materiality and knowledge are found in the search report and in Mr. Weaver's memo to a co-inventor. The search report, which was reviewed by both Mr. Weaver and the prosecuting attorney, listed and discussed the Giles patent. In addition, Mr. Weaver's memo contained his admission that the Giles patent was important. Based upon the foregoing, the district court's findings of materiality and knowledge of materiality of the Bettoli and Giles patents were not clearly erroneous.

[8] With regard to the intent of the applicants to deceive the PTO, our precedent has recognized that intent need not, and rarely can, be proven by direct evidence. *See Merck & Co. v. Danbury Pharmacal, Inc.*, 873 F.2d 1418, 1422, 10 USPQ2d 1682, 1686 (Fed. Cir. 1989). Rather, this element of inequitable conduct must generally be inferred from the facts and circumstances surrounding the applicants' overall conduct. *See Paragon Podiatry Laboratory, Inc. v KLM Laboratories, Inc.*, 984 F.2d 1182, 1190, 25 USPQ2d 1561, 1567 (Fed. Cir. 1993); *Merck*, 873 F.2d at 1422, 10 USPQ2d at 1686. Moreover, we have recognized that the more material the

omission, the less the degree of intent that must be shown to reach a conclusion of inequitable conduct. *See Critikon, Inc. v. Becton Dickinson Vascular Access, Inc.*, 120 F.3d 1253, 1256, 43 USPQ2d 1666, 1668 (Fed. Cir. 1997); *Akzo N.V. v. United States Int'l Trade Comm'n*, 808 F.2d 1471, 1481-82, 1 USPQ2d 1241, 1247 (Fed. Cir. 1986). In light of all the circumstances of the case, as described above, we cannot say that the district court's finding of intent to mislead was clearly erroneous.

Finally, given the factual findings on which the district court's judgment stands, we cannot conclude that the district court abused its discretion in determining that the behavior of the applicants and their prosecuting attorney constituted inequitable conduct. Accordingly, the district court's judgment that Elk's '144 patent is unenforceable due to inequitable conduct is

AFFIRMED.

APPENDIX B

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF TEXAS
DALLAS DIVISION

ELK CORPORATION
OF DALLAS

versus

CIVIL ACTION NO.
3:94-CV-0249-P

GAF BUILDING MATERIALS
CORPORATION AND
BUILDING MATERIALS
CORPORATION OF AMERICA

ORDER RE: DEFENDANTS' EQUITABLE DEFENSES

This is one of two patent infringement suits filed by Elk Corporation of Dallas ("Elk") against GAF Building Materials Corporation ("GAF"). At issue in the two suits are two patents issued to Elk, U.S. Patent No. 344,144 ("Design Patent" or "144 Patent") and U.S. Patent No. 5,369,929 ("Utility Patent" or "929 Patent"). The Court determined the meaning and scope of the two patents in its Order re: Construction of Patent Claims dated September 29, 1997 pursuant to *Markman, et al. v. Westview Instruments, Inc.*, 52 F.3d 967 (Fed. Cir. 1995), *aff'd* __ U.S. ___, 116 S. Ct. 40 (1996).

Both patents pertain to a type of roofing shingle known as laminated roofing shingles.[1] Elk alleges that GAF infringed on its patents, and GAF asserts invalidity and unenforceability of the patents on numerous grounds. Before the Court at this time are the equitable defenses related to the Design Patent which have been raised by GAF in response to Plaintiff claims of patent infringement. The issues are before the Court as GAF's alleged defenses are equitable in nature. *Kingsdown Medical Consultants Ltd. v. Hollister, Inc.*, 863 F.2d 867 (Fed. Cir. 1988).

GAF's equitable defenses consist of allegations of many instances in which GAF claims that Elk acted inequitably in prosecuting the Design Patent. This Order will address each of the species of fraud alleged by GAF related to the Design Patent. GAF's equitable defenses related to the Utility Patent are not before the Court at this time.

I. Allegations of Inequitable Conduct/Fraud on the Patent Office

GAF asserts that Elk, its inventors and patent counsel committed fraud on the Patent & Trademark Office ("PTO") in the following ways:

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[1] Laminated shingles are shingles made up of two asphalt coated sheets. The top sheet, or layer, consists of a headlap portion (which is covered by the next higher row of shingles when installed on a roof) and a buttlap portion. The headlap is a solid asphalt sheet, and the buttlap is cut into a number of tabs or dragon teeth. The bottom sheet is referred to as the backer sheet or backer strip. It is attached to the underside of the top sheet by an adhesive and underlies the buttlap portion of the upper sheet so that portions of the backer sheet are visible through the tabs or dragon teeth in the top sheet.

A. By withholding, with intent to deceive the Deign patent examiner, several material items of prior art ("**Prior Art Fraud**");

B. By presenting to the Design Patent examiner, in order to overcome an initial rejection of its patent application, arguments concerning the prior art cited by the examiner that could not have been made had Elk disclosed far more relevant prior art that Elk knew about but did not disclose ("**Deceptive Argument Fraud**");

C. By disclosing to the Patent Office, in a manner specifically designed to ensure that the examiner would not consider it, certain prior art of which Elk had actual knowledge before the Design Patent formally issued ("**Deceptive Disclosure Fraud**");

D. By falsely claiming that Messrs. Kiik, Weaver and Schultz were the real and sole co-inventors of the Design Patent, when Elk knew that Mr. Stapleton of the 3M Company was the true sole inventor, or at least a co-inventor ("**Inventor Fraud**");

E. By filing with the Patent Office, on February 22, 1993, a sworn statement to add Mr. Stapleton as an inventor and falsely claiming in such statement that his contribution had just been discovered and his original omission inadvertent ("**Belated Discovery Fraud**");

F. By claiming with the Patent application filed on September 18, 1991 to have invented the whole shingle shown in the Design Patent, when the invention was only the addition of the

color striations to the backer sheet of a pre-existing Bettoli-type[2] laminated shingle ("**Ownership Fraud**");

G. By falsely claiming to the Patent Office that the claimed invention of the Design Patent application was ornamental, when Elk knew that the claimed invention was functional and knew that an invention which is functional is not entitled to a design Patent under 35 U.S.C. Section 171 ("**Functionality Fraud**"); and

H. By not disclosing to the Design Patent examiner that the shingle design claimed in the Design Patent had been shown to members of the public more than one year prior to Elk's filing of its Design Patent application dated September 18, 1991, a circumstance constituting a prima facie case of statutory bar to issuance of Elk's Patent under Section 102(b) of the Act ("**Section 102 Fraud**").

II. Burden of Proof

GAF has the burden of proof to show Elk's alleged acts of inequitable conduct during the Patent prosecution process by clear and convincing evidence. *Kingsdown Medical Consultants Ltd. v. Hollister Inc.*, 863 F.2d 867, 872 (Fed. Cir. 1988), *cert. denied*, 490 U.S. 1067 (1989). Inequitable conduct consist of misrepresentation of material information, failure to disclose material information, or filing false material information, coupled with an intent to deceive. *Molins PLC v. Textron, Inc.*, 48 F.3d 1172, 1178 (Fed. Cir. 1995). A party alleging failure to disclose prior art must establish by clear and convincing evidence the "materiality of the prior art, knowledge

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[2] "Bettoli" refers to U.S. Patent No. 3,921,358.

chargeable to the applicant of that prior art and of its materiality, and the applicant's failure to disclose the prior art, coupled with an intent to mislead the PTO." *Id.*; *La Bounty Mfg. v. U.S. Int'l Trade Comm'n*, 958 F.2d 1066, 1076 (Fed. Cir. 1992). Because the recipient of a patent obtains a constitutionally protected monopoly and a statutory presumption of validity via the *ex parte* application process, all participants in a patent prosecution are charged with a very high duty of candor to make full disclosure of any material information throughout the entire patent application process. *Fox Indus., Inc. v. Structural Preservation Sys. Inc.*, 922 F.2d 801 (Fed. Cir. 1990). Inequitable conduct by any participant in the process, whether applicant, inventor or attorney, renders a patent unenforceable, even if the other participants were innocent. *Molins PLC v. Textron, Inc.*, 48 F.3d 1172, 1178 (Fed. Cir. 1995) (knowledge and actions of applicant's attorney are chargeable to applicant for purposes of determining inequitable conduct).

Elk's compliance with its duty to disclose all material information must be judged by the standards of the current version of 37 C.F.R. Section 1.56.[3] Section 1.56(a) imposes a duty of candor and good faith on parties dealing wit the Patent Office. Section 1.56(a) also requires parties in PTO proceedings to disclose "all information known to that individual to be material to patentability." Section 1.56(b) provides that information is material to patentability when it is not cumulative to information already of record or being made

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[3] The current version of Rule 1.56 is applicable to all patent applicants pending or filed after March 16, 1992. *Molins PLC v. Textron, Inc.*, 48 F.3d 1172, 1179 n. 8. (Fed. Cir. 1995) (quoting 57 Fed. Reg. 2021). Because the Design Patient application was pending until February 8, 1994, when the Design Patent issued, this current version of Rule 1.56 is applicable to this case.

of record in the application, and (1) it establishes, by itself or in combination with other information, a prima facie case of unpatentability of a claim; or (2) it refutes, or is inconsistent with, a position the applicant takes in: (I) opposing an argument of unpatentability relied upon by the patent office, or (ii) asserting an argument of patentability. 37 C.F.R. Section 1.56(b).[4]

The duty of candor requires disclosure of any information which would make out a prima facie case against the application, irrespective of whether the applicant could ultimately overcome it. Id. The duty of candor imposed on participants in the patent application process extends throughout the patent's entire prosecution. *Fox Industries v. Structural Preservation*, 922 F.2d 802, 803-804 (Fed. Cir. 1990).

If the court finds that materiality and intent have been shown, the court must then weigh the evidence of materiality and of Elk's intent to deceive in light of all of the evidence, including evidence of good faith, to determine whether under all of the circumstances of the case a finding of inequitable conduct is warranted. The court must determine whether, in light of all of the circumstances, the conduct of the patent applicant is so culpable that the patent should not be enforced. *Molins*, 48 F.3d at 1178. *Id.* A sliding scale analysis is applied when assessing whether a party has established an applicant's intent to deceive. The more material the withheld prior art, the less proof of intent to deceive need be shown. *Gambro Lundia AB v. Baxter Health Care, Inc.*, 110 F.3d 1573, 1580 (Fed. Cir.

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[4] At the time Elk filed its Design Patent application in September 1991, Section 1.56 defined information as material when "there is a substantial likelihood that a reasonable examiner would consider it important in deciding whether to allow the application to issue as Patent." *Molins PLC v. Textron, Inc.*, 48 F.3d at 1179.

1997); *Akzo N.V. v. U.S. Int'l Trade Comm'n*, 808 F.2d 1471, 1481-82 (Fed. Cir. 1986), *cert. denied*, 482 U.S. 909 (1987).

III. Prior Art Fraud

A. Duty to Disclose Relevant Prior Art

A party who alleges the "failure to disclose" form of inequitable conduct must show, by clear and convincing evidence, that (1) the prior art or information at issue is material; (2) the applicant knew of the prior art or information and its materiality; and (3) the applicant's failure to disclose the prior art or information resulted in an intent to mislead the patent office. *Molins*, 48 F.3d at 1178; *FMC Corp. v. Manitowoc Co.*, 835 F.2d 1411, 1415 (Fed. Cir. 1987). GAF alleges that Elk withheld material items of prior art with the requisite knowledge and intent to deceive the examiner. GAF refers to this fraud as the Prior Art Fraud. Prior art generally encompasses all relevant art which was available to the public before the filing of the patent application at issue. The relevant art "is defined by the nature of the problem confronting the would-be inventor." *Ryko Mfg. Co. v. Nu-Star, Inc.*, 950 F.2d 714, 716 (Fed. Cir. 1991).

An assertion of failure to disclose prior art can be rebutted by (1) showing that the prior art or information at issue was not material; (2) if the prior art or information was material, showing that the applicant was not aware of that prior art or information; or (3)if the applicant was aware of the prior art or information, showing that the applicant's failure to disclose the prior art or information did not result from an intent to mislead the patent office. *FMC Corp.*, 835 F.2d at 1415.

B. Manner of disclosing prior art

GAF maintains that any art disclosed as prior art must be expressly denominated as prior art so that the examiner not only does not overlook it, but also can consider the issue of patentability in light of the prior art disclosed. 37 C.F.R. Sections 1.97 and 1.98. GAF asserts that these sections require that disclosures of prior art by an applicant must be on an Information Disclosure Statement ("IDS"). Relying on Section 609 of the Manual of Patent Examining Procedure ("MPEP"), GAF further argues that the patent examiner must make a record of any prior art references that he considers in determining patentability, whether disclosed by the applicant or found by the examiner, on the face of the issued patent. GAF contends that an examiner has not, by definition, considered a piece of prior art if such prior art is not listed on the face of a patent.

If the prior art is not submitted within three months of the filing date of the application on an IDS, GAF submits that it can only be disclosed by listing it on a Supplemental Information Disclosure Statement ("SDS") under 37 C.F.R. Section 1.97(c) and (e) and by either 1) paying an additional fee, or 2) certifying that no individual having duty to make disclosure under 37 C.F.R. Section 1.56 had knowledge of the reference more than three months prior to the filing of the new information disclosure statement and certification. GAF notes that Section 609 of the MPEP provides that prior art listed on patent office form 1449 or an equivalent must be listed on the face of the patent.

Elk, on the other hand, concludes that prior art may be identified to the patent office in many ways, including an IDS. Elk contends that an applicant's duty of disclosure under Rule 1.56(a) does not mandate the use of an IDS under 37 C.F.R. Sections 1.97 and 1.98. Elk notes that Rule 1.97 uses the

optional language "should" and thus the use of an IDS is not required. Elk contends that prior art may also be disclosed in many ways, including the specification, the title, in an examiner's Office Action, in an applicant's response to an Office Action, in an applicant's response to an Office Action, in an affidavit, in an amendment, by third parties and by the submission of a letter to the patent office. In support of its position, Elk cites Section 609 of the MPEP which provides that compliance with the rules for an IDS is not required to have information considered which has been tendered by an applicant in response to an Office Action.

The court agrees that prior art which is properly submitted by means other than a Form 1449 is not printed on the face of a patent. The fact that prior art is not listed on the face of the Design Patent does not mean that the examiner failed to consider it. After consideration of the parties' arguments, the court concludes that prior art may be identified for the patent examiner in ways other than on an IDS.

C. Failure to disclose Bettoli patent

GAF asserts that Bettoli was material prior art that Elk withheld with the requisite intent to deceive. GAF claims that Bettoli, when combined with U.S. Patent No. 2,036,329 ("Giles"), establishes that the concept embodied in the Design Patent was in fact unpatentable because of obviousness.[5]

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[5] Elk directs much of its argument, both in its briefing and at the hearing, to establishing the non-obviousness of its claimed innovation. While the court agrees with Elk that its claimed invention is not obvious, the ultimate determination of the issue of obviousness is not before the court at this hearing. Moreover, that a claimed invention is ultimately found to be patentable over obviousness objections is not the standard when addressing the issue of materiality of undisclosed prior art. *Molins*,

Bettoli is a laminated shingle. Elk argues that neither Bettoli, nor any other laminated shingle prior art, was material because the Design Patent claims only the coloration on the backer sheet as the innovation, not the entire physical structure. Elk cites its Amendment to the Design Patent application filed in September 1993 in support of its argument. The Amendment states that the invention:

> produces an enhanced ornamental appearance by a unique arrangement of colored granules in three striations rather than modifying the physical structure of the shingles.

Elk contends that this statement shows that it did not consider the prior art of laminated shingles relevant to the patentability of the claimed design. While it is true that the innovative feature claimed in the Design Patent is the color striations, it is the color striations on the backer sheet of a laminated shingle which creates the appearance of depth that was claimed by Elk.[6] The evidence showed that color striations on a three tab or strip shingle, rather than creating an appearance of depth, create a zebra stripe appearance by emphasizing the longitudinal aspects of the shingles.[7] Therefore, the prior art of laminated shingles was material to Elk's claimed invention. In this case, since Elk claimed the novel feature of color striations on the backer sheet

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48 F.3d at 1178-1180. (that the claims may be patentable over the withheld prior art is not the test for materiality) (internal citations omitted).

[6] More precisely, Elk claimed the color striations on the backer sheet of a Bettoli laminated shingle, as there are different types of laminated shingles.

[7] Three tab shingles or strip shingles are asphalt shingles consisting of a single asphalt coated sheet.

of a Bettoli laminated shingle, Bettoli was material prior art. Additionally, the fact that the examiner initially rejected the Design application, in part, on the basis of Morgan (U.S. Patent No. 3,624,975), suggests that the examiner believed that laminated shingles were material prior art. Thus, the examiner's rejection of the application on the basis of Morgan, a laminated shingle, is of strong probative value in determining the materiality of Bettoli. *Molins PLC v. Textron, Inc.*, 48 F.3d at 1179.

Consideration by the patent examiner of Morgan during the prosection of the Design Patent did not fulfill Elk's duty to disclose Bettoli as prior art. The PTO initially rejected the Design Patent application as obvious under Morgan and Sadler. In response to this rejection, Elk filed an Amendment in September 1993 distinguishing Morgan from the claimed invention. Elk argued in its Amendment that Morgan achieved the illusion of depth in a laminated shingle through alteration of a physical structure of the shingle. Elk sought to distinguish Morgan by stating that Elk's claimed invention sought to create the illusion of depth through the use of color striations on the backer sheet rather than through modification of the physical structure. Thus, Bettoli is material prior art and is not cumulative prior art of Morgan.

In addition to arguing that it did not consider Bettoli to be material prior art, Elk also argues that it in fact disclosed Bettoli in several ways. First, Elk claims Bettoli was disclosed by virtue of the enclosure of a photograph in the September 1993 Amendment to the Design Patent application. Second, Elk claims that the reference to a "laminated shingle" in the title and preamble of the Design Patent disclosed the existence of Bettoli as prior art. Third, Elk claims that the reference to the 1982 Sweets catalogue in the Design Patent disclosed the laminated shingle prior art.

However, the court is not convinced that the patent examiner would know that the photograph submitted with the 1993 Amendment or the use of the word "laminated" in the title and text of the patent application disclosed a Bettoli laminated shingle as opposed to some other type of laminated shingle. The evidence revealed that there are numerous types of laminated shingles. While a patent examiner is charged with knowledge of the level of skill in the art, the examiner is not necessarily a person skilled in the art. It is apparent from the initial rejection of the '144 application, that the examiner had some familiarity with laminated shingles. However, it is not apparent that the examiner construed the photograph submitted with the 1993 amendment or the term "laminated shingle" to disclose a Bettoli laminated shingle. The evidence is in fact to the contrary. The examiner rejected the application on the basis of a Morgan laminated shingle, rather than Bettoli. Because the shingle submitted by Elk in its application is a Bettoli shingle, reason dictates that the examiner would have used Bettoli rather than Morgan in her obviousness analysis if she had known of Bettoli. The court finds that neither the photograph submitted by Elk with its 1993 amendment nor the use of the term "laminated shingle" in the title and text of the patent application disclosed Bettoli to the patent office.

Finally, the court does not agree with Elk that disclosure of the 1982 Sweets Catalogue showing the "Woodlands" laminated shingle made by Johns-Mansville disclosed the Bettoli laminated shingle as prior art. It is true that the catalogue was listed as prior art on the face of the Design Patent. However, it is not clear that the examiner would have been able to tell from the black and white photocopy of the brochure enclosed with the application that the pictures in the brochure showed laminated shingles, much less Bettoli shingles.

Given the high duty of candor which a patent applicant must meet, Elk's submission of the photograph, the use of the term "laminated shingle" and the enclosure of the brochure without specific reference to Bettoli did not fulfill Elk's duty to disclose Bettoli. Based on the foregoing, the Court finds that Bettoli is material prior art that Elk failed to disclose.

D. Failure to disclose Giles

GAF alleges that Giles, like Bettoli, was material prior art which Elk failed to disclose. GAF contends that a combination of Giles and Bettoli makes a prima facie case of obviousness for the Design Patent under 35 U.S.C. Section 103. Further, GAF alleges that Elk withheld Giles with the requisite intent to deceive.

Elk contends that it decided not to disclose Giles because it considered Giles to be not material or cumulative art of U.S. Patent No. 2.253.652 ("Ritter") and U.S. Patent No. 309,027 ("Noone") which were disclosed. Elk maintains that disclosure of Noone and Ritter fulfilled its duty of candor to disclose prior art coloration patents. Elk argues that Ritter is much closer than Giles to the claims of the Design Patent. GAF responds that Ritter shows only two bands of color while Giles and the Design Patent both teach three bands of color. Elk counters that Ritter in fact shows at least three bands of different color value, from dark to light, and that Giles shows only a gradual fade-out of color of two color zones.

Elk also argues that Giles need not have been disclosed because it is not commercially feasible. Elk argues that Giles, like Ritter, does not produce an illusion of depth as both are strip shingles. Instead, Elk notes that embodiments of both Giles and Ritter, because they are three-tab or strip shingles, look like zebra stripes when applied to a roof. Elk further argues that no shingle could be produced under Giles due to the

time required to allow the spray paint to dry. Elk notes that a prior art reference that uses a method different from the patentee's invention to accomplish the same result is less material than a reference that uses the same method. *Halliburton Co. v. Schlumberger Technology Corp.*, 925 F.2d 1435, 1442 (Fed. Cir. 1991). However, feasibility of producing a design embodied in a design patent is not a consideration in determining materiality and does not negate the relevance of this prior art. Additionally, the court notes that Giles also provides that granules can be substituted for paint to create the color effect.

GAF counters that Elk had the duty to disclose both Ritter and Giles and allow the patent examiner to decide the materiality of each. *Baxter Int'l Inc. V. Baxter Healthcare Corp.*, 1996 W.L. 145778 at *7 (N.D. III. 1996) (citing *La Bounty Mfg. v. U.S. Int'l Trade Comm'n*, 958 F.2d 1066, 1076 (Fed. Cir. 1992)). It is true that the duty to disclose material information does not mean that an applicant need only disclose the closest prior art. Instead 37 C.F.R. Section 1.56(a) provides that an applicant must disclose all material non-cumulative prior art without regard to whether the applicant considers a particular piece of prior art to be closer to the proposed patent at issue than another. In the case of a close call, the applicant must disclose both pieces of prior art in order for the examiner to decide the materiality of each. *Baxter Int'l Inc.*

Elk argues that Giles teaches away from the Design Patent because Giles is a three tab shingle and the visual effect created by striations on a three tab shingle is different from the effect created by Noone and '144 patent design. The court agrees that Giles, by itself, does not teach what the Design Patent claims. However, the test of materiality in Section 1.56(b) is whether information establishes, "by itself or in combination with other information, a prima facie case of unpatentability... ." Giles teaches horizontal zones, or striations, of colors on shingles to

create an appearance of depth. The examiner initially rejected the Design application, in part, on the basis of Sadler III because Sadler "shows horizontal strips spaced evenly, midway the face of the shingle to be old in the prior art." (PTO's notice of rejection dated June 13, 1993, p.3). This office action by the PTO placed Elk on notice that the PTO considered prior art showing horizontal coloration material to the claimed invention. Certainly, Giles is closer prior art with respect to horizontal coloration on shingles than is Sadler. Elk was award of Giles since the summer of 1991 because Giles was listed in the search report ordered by Elk in preparation for the filing of the '144 patent application. When Elk filed its Amendment in September 1993 in response to the PTO's initial rejection. Elk was under the continuing duty imposed by Rule 1.56(a) to disclose all material prior art. *Fox Industries v. Structural Preservation Systems*, 922 F.2d at 803. Yet in its Amendment, Elk sought only to distinguish Sadler III without fully citing all material prior art and failing to disclose more material prior art.

As noted, it cannot be disputed from the evidence that Elk had knowledge of Giles and of its materiality to the Design Patent application. Giles was listed in the prior art season report prepared for Elk by the Nies firm in June 1991. Subsequent to the search report, Paul Weaver, one of the listed inventors, referenced Giles in a letter to Mr. Kiik, another listed inventor, in which Weaver discussed the results of the search report. The Court does not accept Elk's position that Ritter and Giles are cumulative as the coloring designs of Ritter and Giles are not equivalent. Based on the evidence before the Court, the Court concludes that Giles is material, non-cumulative prior art. Elk should have disclosed Giles and allowed the examiner to decide its materiality.

D. Failure to disclose GS High Sierra

GAF also asserts that the GS High Sierra ("High Sierra") shingle was non-cumulative prior art that Elk failed to disclose. GAF contends that the High Sierra is a laminated shingle that uses color in a similar manner that the Design Patent uses color to create the illusion of depth. Elk argues that its disclosure of Noone satisfied its duty of candor because Noone is closer prior art than the High Sierra rendering the High Sierra cumulative.

The High Sierra is a laminated shingle that uses a shadow line of the same base color as the rest of the backer sheet. In contrast, the Noone Patent is a strip shingle that shows a black shadow line. GAG argues that the High Sierra is closer to the Design Patent than Noone because the High Sierra is a laminated shingle which bears a darker band of the same color and could be converted into the Design Patent shingle merely by adding a middle band of color to the backer sheet.

The court finds that the GS High Sierra is material prior art which should have been disclosed by Elk. The High Sierra is a laminated shingle, unlike the other prior art cited by Elk and uses a band of color at the top of the backer sheet to create the appearance of depth. The band of color used in the High Sierra is a darker shade of the color of the shingle like the concept in the Design Patent. However, the High Sierra does not have the color striations used in the Design Patent. Additionally, the court finds that the High Sierra is more a variation of the shadow lines used on other types of shingles to create the appearance of depth. Generally, shingles using a shadow line used a black line to create a shadow effect. However, the appearance of the shadow was described as appearing somewhat artificial. By using a darker shade of the color of the shingle instead of black, the artificial appearance of the shadow line is somewhat ameliorated. However, from a distance it is difficult to tell that the shadow line on the High Sierra is in fact

a darker shade of the color of the shingle rather than a black line, at least on the sample board introduced into evidence. Until evidence was presented that the High Sierra used a color other than black to create the shadow line, the appearance of the shingle on the sample board from a distance in the courtroom appeared to be a black line. Thus, the concept used in the High Sierra is a variation of the shadow line concept rather than the concept of color striations used in the Design Patent. It is apparent to the court that the two concepts are not viewed the same in the industry, as the shadow line is not as effective as the color striations in creating the appearance of depth without appearing artificial. Shadow line shingles are view as inferior art to the striations concept embodied in the Design Patent.[8]

GAF contends that Elk's decision to list only the Noone prior art in the Design Patent application reflects "defensive patenting". The Certain-Teed Corporation, the manufacturer of Noone, notified Elk by letter that it believed that the Elk Prestique Plus High Definition shingle, which embodies the Design Patent might infringe Noone. GAF argues that Elk did not want to fulfill its duty to disclose all material art in the Design Patent application prosecution. Instead GAF claims that ELK merely sought to ward off a patent infringement suit by Certain-Teed

However, any "defensive" motives that Elk may have harbored when it listed Noone and Noone's prior art references in the Design Patent application are not indicative of inequitable conduct. It does not concern the Court that Elk may have wanted to head off a lawsuit for infringement brought by Certain-Teed. The issue before the court is whether Elk

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[8] The Court also notes that Noone is strip shingle, albeit a simulated laminated shingle, which uses a shadow line. In a memo to Mike Kiik, Paul Weaver described Noone as having a "used by almost everybody" shadow line. (Def. ex. 89)

fulfilled its duty of candor to the PTO in prosecuting its patent application.

E. Intent to Deceive

The court has found that Elk failed to disclose material prior art of which it had knowledge. The next step in the inequitable conduct analysis is to determine whether the failure to disclose was done with the intent to deceive the patent office. The only reason given by Elk for failing to disclose the above discussed prior art is that it believed the prior art disclosed was the closest and most pertinent to the application, and did not disclose Bettoli, Giles and the GS High Sierra because it believed they were either not material or were cumulative to the cited art. From the evidence presented, the court cannot agree with Elk that the most material art was in fact disclosed. However, even assuming the prior art cited by Elk was the most material prior art does not end the inquiry under Rule 1.56(a). It is worth noting again that Rule 1.56(a) requires a party to disclose all material prior art not only the prior art considered by the applicant to be the most material. Elk made only a partial disclosure of material prior art and did not disclose the other material, if not the most material, prior art. Bettoli is the very shingle modified by Elk in the Design Patent application, and Giles is as material prior art, with respect to the coloration issue, as any of the art cited by Elk. GS High Sierra is a laminated shingle which uses a color striation to create the appearance of depth. Yet none of these were cited by Elk.

Thomas Felger, the attorney who filed the 1993 Amendment on behalf of Elk testified that he believed Noone was the most pertinent prior art because it teaches that placing a portion of a shingle with at least two different tones of colors adjacent to portions of the shingle of uniform color creates an appearance of depth. However, Noone is a three tab shingle, which

simulates a laminated shingle, that uses a shadow line, rather than color striations, to create the appearance of depth. The evidence showed that three tab shingles and laminated shingles are considered as entirely different products in the industry. The laminated single is considered a superior product to the three tab single. Apparently, there have [been] ongoing efforts in the roofing industry to enhance the appearance of asphalt shingles by enhancing the appearance of depth in otherwise flat shingles. However, because three tab shingles and laminated shingles are viewed differently, the efforts at enhancing the appearance of the two types of shingles has not been parallel nor coordinated. While there have been some efforts at using color striations on three tab shingles to enhance the appearance of depth, those efforts were not considered successful because striations on three tabs created an appearance of zebra stripes rather than in appearance of depth. The efforts at enhancing the appearance of laminated shingles was most often done by the use of shadow lines. However, shadow lines are not viewed as favorably by the industry, and apparently the public, as color striations in creating the appearance of depth. Shadow lines are considered by the industry as looking somewhat artificial and are considered inferior to the color striation concept of the Design Patent. Elk's own witnesses testified that they considered strip shingle art and shadow line art inferior to its claimed innovation. The court agrees that Elk indeed made a unique discovery with its claimed innovation which was superior to the strip shingle and shadow line prior art. However, that position by Elk is inconsistent with the argument it now makes that it considered Noone, a strip single using shadow lines to be the most material prior art.

Additionally, Elk's argument does not satisfactorily explain why the GS High Sierra was not disclosed. The High Sierra is a laminated shingle which has valleys of two color tones in between tabs of uniform color to create an appearance of depth.

This is the same thing Elk claims is taught by Noone. The High Sierra, however, is a Bettoli laminated shingle, like the shingle in Elk's claimed invention, which makes it closer prior art than Noone.

It is also noteworthy that the examiner initially rejected the Design Patent as obvious under Morgan and Sadler III rather than Noone or Ritter. Additionally, evidence was presented showing that the PTO rejected the '929 Utility Patent application twice, once on the basis of Morgan and Giles, and once on the basis of Bettoli and Giles. Noone and Ritter were cited by Elk in the '929 application. Certainly, the PTO considered Bettoli, Morgan, and Giles more material prior art than Noone or Ritter.[9] This indicates the materiality of Bettoli, laminated shingle prior art, and of Giles. Moreover, Bettoli is better art with respect to the '144 patent than is Morgan, and Giles is better art as to the use of horizontal color striations on shingles to create the appearance of depth than is Sadler III.

The Nies search report of June 1991 to Elk noted that no patent was found that disclosed the specific invention claimed in the '144 patent application. The Nies report discussed prior art, including Giles, considered relevant to Elk's application. The significance of Giles was not lost on Elk as Paul Weaver, one of the inventors, following receipt of the Nies report, noted in a memo to Mike Kiik that Giles was of "special interest." (Def. ex. 89) Elk argues that Weaver was merely reiterating in his memo what the Nies report stated. The court does not agree

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[9] Felger's testimony shows the importance of the rule that all material information be cited rather than what applicants believe is most important. Despite the fact that the PTO clearly considered Bettoli, Morgan, and Giles more material prior art than Noone or Ritter, Felger still maintained at trial that Noone is the most material prior art with respect to Elk's patents and maintained that Giles and Bettoli were not material or were cumulative.

with that assessment of Weaver's memo. The Nies report listed eight patents, including Noone, Ritter and Giles, as being of interest in the field of the invention. Of the eight patents issues, the Nies report specifically discussed Giles, Ritter, Noone, Morgan et al. and Bradley. In contrast, Weaver's memory to Kiik specifically mentions only Giles and describes it as being of "special interest." Clearly Elk knew of the materiality of Giles.

Further, both Elk attorneys testified that they ordinarily cite as prior art all references reported in search reports. That was not done in the '144 application as Giles and other cites in the Nies report were not disclosed to the PTO. In light of the evidence, Elk's argument that it considered Giles, Bettoli, and High Sierra not material or cumulative of Noone and Ritter is neither credible nor able to withstand objective scrutiny. Because the reasons given by Elk for not disclosing material prior art are not credible nor objectively reasonable, the court cannot but draw the inference that failure to disclose was done with the intent to deceive or certainly with such recklessness that an inferences of intent to deceive is warranted. *Halliburton*, 925 F.2d at 1442-1443. Thus the court finds that Elk withheld material prior art by failing to disclose Bettoli, Giles, and the High Sierra both when it filed its application on September 18, 1991, and when it filed its Amendment on September 13, 1993. The court further finds that Elk withheld the prior art with knowledge of the materiality of the undisclosed prior art and with intent to deceive the PTO.

Whether Elk engaged in inequitable conduct is a close question for this court. Elk could have believed that laminated shingle art was before the PTO because Elk used the term "laminated shingle" in the title of its patent application and in the September 1993 Amendment. Also, Elk disclosed prior art that referenced use of color on shingles by disclosing Ritter and Noone. However, Elk failed to disclose the most material

laminated shingle prior art by not disclosing Bettoli, and failed to disclose Giles and the High Sierra which are more material with respect to the use of color than are Noone and Ritter. It appears to the court, that Elk decided to disclose as little as, in its view, it could get by with and still obtain its patent. However, disclosing as little as an applicant believes it can get by with is not the duty imposed on parties to PTO proceedings. Elk's conduct in this case falls short of meeting Elk's obligation of candor to the PTO. The court thus finds, upon weighing Elk's conduct in light of all of the evidence in the case, that Elk engaged in inequitable conduct in prosecuting its Design Patent and that its patent should not be enforced.

IV. Deceptive Argument Fraud

A patent application may not advance an argument to the patent office that could not have been made had the applicant disclosed some other, undisclosed prior art. 37 C.F.R. Section 1.56(b) (1995). This type of inequitable conduct means that an applicant for a patent committed two bad acts: 1) withholding prior art; and 2) making an argument that the applicant could not have made had he disclosed the prior art.

GAF claims that Elk made arguments about the differences in its claimed invention and the less pertinent prior art references cited by the examiner so as to overcome the examiner's initial Section 103 obviousness rejection--arguments that could not have been made without Elk's willful concealment of Giles. Bettoli and the High Sierra as prior art. For the reason's discussed above, the court agrees with GAF and finds that Elk engaged in equitable conduct when it filed its September 1993 Amendment. The arguments made by Elk to distinguish Morgan and Sadler III could not have been made had Elk disclosed Bettoli, Giles and the High Sierra.

V. Deceptive Disclosure Fraud

Although a patent examiner may consider prior art disclosed after a notice of Allowance has been issued, the examiner may do so only if the applicant complies with the procedures set forth in 37 C.F.R. Section 1.97(d) and (e) (1992); MPEP Section 609 (Rev. 14, Nov. 1992). If an applicant learns of prior art after a Notice of Allowance but before both the issue fee has been paid and the patent has formally issued, the applicant can fulfill his duty of candor in the following manner:

1. The applicant may disclose the prior art on a patent office IDS form accompanied by (a) a certification under 37 C.F.R. Section 1.97(e), (b) a petition requesting consideration of the IDS, and (c) the petition fee set forth in 37 C.F.R. Section 1.17. The result is that the patent examiner will consider the newly discovered prior art, and may then withdraw the Notice of Allowance if the examiner believes that it is appropriate to do so. 37 C.F.R. Section 1.97(d) (1992); MPEP Section 609 (Rev. 14, Nov. 1992).

2. If the applicant is unable or unwilling to comply with the requirements of 37 C.F.R. Section 1.97(d), the applicant may file a continuation application so that the information might be considered by the examiner, while abandoning the "allowed", but not yet issued, patent by not paying the issue fee. MPEP Section 609 (Rev. 14, Nov. 1992).

Once a patentee has paid the issue fee, any IDS filed by the patentee will not be considered by the patent examiner but will merely be placed in the patent application file. 37 C.F.R. Section 1.97(e); MPEP Section 609 (Rev. 14, Nov. 1992). After payment of the fee, the only way to have the examiner consider new prior art is for the patentee to withdraw the application from issue pursuant to 37 C.F.R. Section 1.313(b)(5) so that the information could be considered in a continuation application. *Id.*

GAF claims that Elk was put on actual notice of coloration prior art, Fire-Chex, which GAF claims was far more relevant and closer to the color striations Elk claimed than any prior art considered by the examiner. GAF introduced into evidence a memorandum prepared by Elk's attorneys which indicates that Elk knew that the patent examiner would not consider the supplemental information of Fire-Chex. To find that Elk conducted itself with inequitable conduct with respect to the manner in which Elk disclosed Fire-Chex, the court must still find that the information was material and Elk withheld it with the requisite intent to deceive.

Fire-Chex is a three tab shingle with horizontal color striations but with the darkest striation on bottom and the lighter striations top. This is the opposite of Elk's claimed invention. The court finds that the Fire-Chex prior art, if material, was at best cumulative prior art which is not cumulative to information not already of record. Thus, the Deceptive Disclosure Fraud allegation has no merit.

VI. Inventor Fraud and Belated Discovery Fraud

GAF maintains that Elk deliberately claimed that Messrs. Kiik, Weaver and Schultz were the only true inventors of the Design Patent in the initial application even though Elk knew that Mr. Pat Stapleton of the 3M Company was the sole true inventor or at least a co-inventor. GAF refers to this as the Inventor Fraud. GAF also claims that Elk committed Belated Discovery Fraud by filing the Amendment which added Stapleton as an inventor or at least a co-inventor. GAF refers to this as the Inventor Fraud. GAF also claims that Elk committed Belated Discovery Fraud by filing the Amendment which added Stapleton as an inventor or at least a co-inventor and claiming that his contribution had only recently been discovered and his original omission was inadvertent. Any

alleged, deliberate error in the identify of the inventor(s) of a patent is certainly important as the inventors are the owners of the rights to exclude others from making or selling an innovation.

An error in determining inventorship is not by itself inequitable conduct. Whenever an inventor is omitted in a patent application, the application may be amended to correct this error where the error arose without any deceptive intent. 35 U.S.C. Section 116. Such error must be "inadvertent" on the part of the originally named inventors. 37 C.F.R. Section 1.48. The ultimate question of the identify of the true inventors and thus whether a statutory ground for invalidity exists is a jury question. *ShatterproofGlass Corp. v. Libby-Owens Ford Co.*, 758 F.2d 613, 623-24 (Fed. Cir. 1985). However, the issue before the Court at this time on GAF's equitable defenses is whether Elk purposefully misrepresented or failed to disclose facts which would be important to a patent examiner or which would make a prima facie case of non-patentability based on incorrect claims of inventorship.

Certain facts are undisputed. Kiik and Mr. Robert Morrow of 3M spoke on the telephone regarding Stapleton's contribution to the innovation in the invention embodied in the Design Patent on December 5, 1991. On February 1, 1993, the 3 M Company executed a release of any rights that it may have had in the Design Patent in favor of Elk, and Elk, in turn, indemnified 3M for any claims arising from the Design Patent. Elk filed an SDS on February 2, 1993, setting forth the circumstances under which it alleged that Stapleton was omitted as an inventor.

GAF claims that Elk, in fact, engaged in a quid quo pro with 3M for 3M to release all rights to the Design Patent in exchange for Elk's giving Stapleton credit for his participation as a co-inventor. GAF also alleges that Elk made several inaccurate statements in the documents submitted to the PTO regarding the

manner in which Elk learned of 3M's co-inventorship and the manner in which the Elk and 3M agreed to address the situation. Elk consistently denied that a quid pro quo exchange was made for 3M's rights to the Design Patent and Elk's indemnification of 3M.

The Court does conclude that there was a quid quo pro exchange when 3M gave up its rights in exchange for Stapleton being listed as a co-inventor and for Elk's indemnification. However, Elk's obtaining 3M's release of the rights to the Design Patent in return for Elk's indemnifying 3M does not precipitate a finding of intent to deceive the PTO or of inequitable conduct. The exchange between 3M and Elk appears to have been an honest effort to resolve issues of inventorship disagreement between the companies. Additionally, the evidence supports Elk's argument that all four individuals ultimately listed as inventors had some role in bringing about the ultimate design which was submitted to the PTO.

In the instant case, Elk's conduct does not reflect an intent to deceive the Patent Office. Stapleton's participation occurred in 1988, about three years prior to the filing of the Design Patent application. That Stapleton never met Kiik or Weaver and that Schultz never met Kiik or Weaver is not dispositive of the issue. The evidence shows that each of the alleged inventors contributed to the innovation in the Design patent although they never met. It is certainly plausible that Kiik, Weaver, Stapleton and Schultz each contributed to the innovation in the Design Patent, the distinct color striations on the backer sheet to create depth, given that the experimental prototype with a gradual color blend was not produced until three years later. The Court concludes that Elk did no deliberately misstate the facts regarding Stapleton's inventorship with the requisite intent to deceive. Based on the

foregoing, the Court concludes that the Inventorship Fraud and the Belated Discover Fraud alleged by GAF are without merit.

VII. Ownership Fraud

GAF also alleges that Elk committed fraud by claiming in the Design Patent application to have invented the entire laminated shingle shown in the Design Patent when it at most invented only the color striations on the backer sheet of a Bettoli laminated shingle. As the court has previously determined that the Design patent claimed only the novel features of a laminated shingle, not the entire shingle, GAF's allegation of ownership fraud is without merit.

VIII. Functionality Fraud

GAF complains that Elk falsely claimed to the Patent Office that the Design Patent was ornamental when Elk and its inventors knew that the claimed invention was functional and thus not entitled to a design patent under 35 U.S.C. Section 171.

However, it is apparent from the '144 patent application and the amendment filed in September 1993, that Elk was claiming the three color striations on the backer sheet were ornamental. The patent office issued the Design Patent and the patent carries a presumption of validity. 35 U.S.C. § 282. As claimed in the Design Patent, the color striations appear to be ornamental. GAF has not produced clear and convincing evidence of the falsity of Elk's claim, nor has GAF produced clear and convincing evidence that Elk made the claim with intent to deceive the patent office. The court finds that Elk did not engage in inequitable conduct by claiming in the Design Patent application that the claimed invention was ornamental.

IX. Section 102 Fraud

GAF contends that the shingle design claimed in the Design Patent was displayed to the public over a year before the Design Patent application was filed. GAF asserts that a shingle made in the same design as the Design Patent was produced in 3M's color lab in 1988. GAF contends that this public disclosure established a prima facie case of unpatentability under Section 102(b) of Title 35 and should have been disclosed to the PTO. GAF alleges that Elk's failure to disclose to the PTO this public display constitutes inequitable conduct. Section 102(b) provides:

> A person shall be entitled to a patent unless (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country more than one year prior to the date of the application for patent in the United States[.]

The failure to disclose prior use or sale of a product may constitute inequitable conduct if the party alleging such inequitable conduct can show that the failure to disclose was done with intent to mislead or deceive the PTO. *Paragon Podiatry Laboratory, Inc. v. KLM Laboratories, Inc.*, 984 F.2d 1182, 1192-93 (Fed. Cir. 1993). Whether an invention was on sale or in use within the meaning of Section 102(b) is a question of law. *Id.* at 1186. A party seeking a patent has a duty to disclose all uses and sales of its invention more than one year before it filed its application, if such information would be deemed "material." *Id.* At 552. As discussed previously, Rule 1.56(b) defines materiality as information which establishes a prima facie case of unpatentability.

On the evidence presented, the court finds that a prima facie case of unpatentability is not made out by Elk's production of a shingle with color striations at the 3M lab in 1988. The work done at the 3M lab in 1988 was a part of continuing efforts in the industry to produce shingles with an enhanced appearance of depth and was clearly not a "public use". The shingle produced in 1988 had striations of gradual gradations in color from top to bottom instead of the distinct striations of the Design Patent. The 1988 product did not accomplish what Elk was seeking, and it was not until 1991 that Elk came up with the design incorporated in the Design Patent "The use of an invention by the inventor himself, or of any other person under his direction by way of experiment, and in order to bring the invention to perfection, has never been regarded as [a public] use." *Lough v. Brunswick Corp.*, 86 F.3d 1113, 1120 (Fed. Cir. 1996) (internal citations omitted). The 1988 work at the 3M lab was not material to the patent application and thus did not need to be disclosed. Accordingly, the Court finds no inequitable conduct from Elk's failure to disclose the shingles prepared in 1988 at the 3M lab.

X. Estoppel

GAF asserts equitable defenses, grounded in the doctrine of judicial estoppel, of patent estoppel and trade dress estoppel. GAF maintains that Elk should be estopped from denying that the design claimed in its '144 Patent is functional because Elk later obtained a utility patent on the same invention. GAF argues that if Elk is estopped from denying that the design claimed in the '144 patent is functional, then the '144 Patent is invalid since a design patent cannot issue on an invention that is functional. *L.A. Gear, Inc. v. Thom McAn Shoe Co.*, 988 F.2d 1117, 1123 (Fed. Cir. 1993).

Additionally, citing *Two Pesos, Inc. v. Taco Cabana, Inc.*, 505 U.S. 763, 112 S.Ct. 2753 (1992), GAF contends that if the claimed design of the '144 Patent is functional, Elk is estopped from asserting a trade dress infringement claim because functionality is a complete defense to a claim of trade dress infringement.

With respect to both estoppel arguments, the court notes that the patent examiner in the Utility Patent proceeding had before him several references to the Design Patent. On the facts of this case, GAF's estoppel arguments are without merit. Elk is not estopped from denying the functional features of its claimed invention simply because it obtained a design patent and a utility patent on what GAF contends is the same invention. It remains to be determined whether Elk's claimed invention is in fact functional, ornamental, or both.

Conclusion

The court finds that Elk engaged in inequitable conduct by failing to disclose material prior art by failing to disclose Bettoli, Giles, and the GS High Sierra when Elk knew of this prior art, had knowledge or should have had knowledge of the materiality of the undisclosed prior art, and withheld the prior art with intent to deceive the Patent and Trademark Office. Accordingly, Elk's Design Patent No. 344,144 is unenforceable.

SO ORDERED this 10 day of October 1997.

JORGE A. SOLIS
UNITED STATES DISTRICT JUDGE

APPENDIX C

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF TEXAS
DALLAS DIVISION

ELK CORPORATION
OF DALLAS

versus

CIVIL ACTION NO.
3:94-CV-0249-P

GAF BUILDING MATERIALS
CORPORATION and
BUILDING MATERIALS
CORPORATION OF AMERICA

PARTIAL FINAL JUDGMENT

Pursuant to this Court's Memorandum Opinion and Order filed on October 10, 1997 and this Court's Order of April 17, 1998,

It is ORDERED ADJUDGED and DECREED that:

1Defendants GAF Building Materials Corporation and Building Materials Corporation of America's counterclaim for declaratory judgment that Elk's U.S. Patent Des. No. 344,144 is unenforceable due to inequitable conduct in the prosecution of the patent is granted, and Elk's U.S. Patent Des. No. 344,144 is declared unenforceable;

2Elk's claims in its Second Amended Complaint that GAF infringed U.S. Patent Des. No. 344,144 are dismissed; and

3there being no just reason to delay entry of judgment, judgment is hereby entered pursuant to Rule 54(b).

IT IS SO ORDERED.

Signed on this 17th day of April, 1998 at Dallas, Texas.

JORGE A. SOLIS
UNITED STATES DISTRICT JUDGE
NORTHERN DISTRICT OF TEXAS

APPENDIX D

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF TEXAS
DALLAS DIVISION

Elk Corporation of Dallas, Plaintiff,	§	
v.	§	CIVIL ACTION NO.
	§	3:94-CV-0249-P
GAF Building Materials Corporation, Defendant.	§	3:94-CV-2607-P
	§	
	§	
	§	
Elk Corporation of Dallas, Plaintiff,	§	
v.	§	CIVIL ACTION NO.
	§	3:94-CV-0249-P
GAF Building Materials Corporation, and Building Materials Corporation of America, Defendants.	§	3:94-CV-2607-P
	§	
	§	
	§	
	§	

ORDER RE: CONSTRUCTION OF PATENT CLAIMS

These cases are patent infringement suits filed by Elk Corporation of Dallas ("Elk") against GAF Building Materials Corporation ("GAF"). At issue in these suits are two patents issued to Elk, U.S. Patent No. 344,144 ("Design Patent" or "144 Patent") and U.S. Patent No. 5,369,929 ("Utility Patent" or "929 Patent"). Both patents pertain to a type of roofing

shingle known as laminated roofing shingles.[1] Elk claims that GAF infringed on its patents, and GAF asserts invalidity and unenforceability of the patents on numerous grounds.

I. Background

It is well established that a determination of patent infringement involves a two step analysis. The first step is to construe the patent claim to determine its scope and meaning. Second, the claim as properly construed must be compared to the accused device or process. *Carroll Touch, Inc. v. Electro Mechanical Systems, Inc.*, 15 F.3d 1573, 1576 (Fed. Cir. 1993).

The Supreme Court, in *Markman, et al. v. Westview Instruments, Inc.*, ___ U.S. ___, 116 S.Ct. 1384, 134 L.Ed.2d 577 (1996), held that construction of the scope and meaning of a patent is a question of law for the court to decide. In order to make a determination as to the scope and meaning of the patents in issue, the court may hear arguments and take in evidence as deemed necessary. In accordance with *Markman*, the court held a hearing on December 9 and 10, 1996 in order to hear evidence with respect to construction of the claims in the patents at issue.

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[1] Laminated shingles are shingles made up of two asphalt coated sheets. The top sheet, or layer, consists of a headlap portion (which is covered by the next higher row of shingles when installed on a roof) and a burlap portion. The headlap is a solid asphalt sheet, and the buttlap is cut into a number of tabs or dragon teeth. The bottom sheet is referred to as the backer sheet or backer strip. It is attached to the underside of the top sheet by an adhesive and underlies the buttlap portion of the upper sheet so that portions of the backer sheet are visible through the tabs or dragon teeth in the top sheet.

As a preliminary matter, the parties take somewhat different approaches as to the type of evidence that is admissible and properly considered by the court in construing the patents. In construing patents, courts can consider both intrinsic and extrinsic evidence. *Vitronics Corp. v. Conceptronics, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996). Intrinsic evidence is evidence contained in the records of the Patent & Trademark Office ("PTO") and consists of the claims in the patent, the specifications and the prosection history. *Id.; Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed. Cir. 1995). Extrinsic evidence is evidence which is external to the patent file history. *Markman*, 52 F.3d at 980.

The claims in a patent must conform and agree with the invention as set forth in the remainder of the specifications. 37 C.F.R. Section 1.75(d)(1). Further, the terms and phrases used in the claims must be supported in the description of the specifications so that the meaning of the terms in the claims may be ascertainable by references to the description. *Id.* Any technical term used in a patent document is interpreted as having the meaning that it would be given by persons experienced in the field of the invention, unless it is apparent from the patent and the prosecution history that the inventor used the term with a different meaning. *Vitronics*, 90 F.3d at 1582.

Claims may also be read in view of the specification, of which they are a part. *Markman*, 52 F.3d at 979. The specifications serve as a dictionary because they expressly define terms used in the claims and also may define terms by implication. *Vitronics*, 90 F.3d at 1582. The specifications must contain a written description of the invention which must be clear and complete enough to enable those of ordinary skill in the art to make and use the invention described. *Id.* Thus,

the specifications are "always highly relevant" to determining the meaning of disputed claims, are usually dispositive, and are the "single best guide to the meaning of a disputed term." *Id.*

The public administrative record leading to issuance of a patent is referred to as the prosecution history, file history or the file wrapper. This public record is "of primary significance in understanding the claims." *Markman*, 52 F.3d at 980.

Taken together, these three sources of intrinsic evidence, that is the claims, specifications and file history, are "the most significant source of the legally operative meaning of disputes claim language." *Vitronics*, 90 F.3d at 1582.

Extrinsic evidence, which is external to the patent and file history, may include expert testimony, inventor testimony, dictionaries, and technical treatises and articles. *Vitronics*, 90 F.3d at 1584. Although technical treatises and dictionaries fall within the category of extrinsic evidence, as they are not a part of an integrated patent document, courts are free to consult such resources at any time in order to better understand the underlying technology and may also rely on dictionary definitions when construing claim terms, so long as the dictionary definition does not contradict any definition found in or ascertained by a reading of the patent documents. *Id.* at 1584, n. 6.

Prior art and, to a lesser extent, dictionaries are more objective and reliable guides in interpreting the meaning of a patent then expert testimony and also are accessible to the public in advance of litigation. In particular, opinion testimony on claim interpretation should be approached with caution as it is no better than opinion testimony on the meaning of a statute. *Id.* at 1584.

Another source of extrinsic guidance is prior art[2] offered into evidence, which is an excellent guide to how a disputed term is used by those skilled in the art. In comparison to prior art, expert testimony may reflect only the opinion of a particular party's expert as to what a term means. *Id.* at 1584.

Elk advocates that the court should examine both intrinsic and extrinsic evidence in construing the Patents' claims. Elk suggests that the court should first look to the intrinsic evidence, but that the court may also consider extrinsic evidence in order to understand the patented technology.

GAF argues that the court should first examine the claims to determine scope and meaning and also examine the specifications for the limited purpose of determining if the patentee has assigned meanings to words used in the claims other than their plain or ordinary meanings. If, from this review, the court determines that the claims are unambiguous, then the court need not consider any other evidence. If there is an ambiguity in the claims themselves, then the court should first look to the specifications to resolve it. If an ambiguity still remains, then the court may look to the file history if offered into evidence by the patentee. With respect to extrinsic evidence, GAF asserts that while reliance on such evidence may be proper to help explain the meaning of ambiguous terms in the claims, such evidence is unnecessary in this case due to the nature of the technology involved.

The court finds that it may properly look to all of the intrinsic evidence in determining the scope and meaning of the

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[2] Note that prior art which is cited within the Patents is intrinsic evidence. Id. at 1583.

claims in the patents. *Markman* as well as prior and subsequent case law make clear that the specifications and file history are very important in construing a patent's claims. *Markman*, 52 F.3d at 980 (file history is of "primary significance" in understanding the claims).[3] In Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed. Cir. 1996), the Federal Circuit stated:

> It is well-settled that, in interpreting an asserted claim, the court should look first to the intrinsic evidence of record, *i.e.*, the patent itself, including the claims, the specifications and, if in evidence, the prosecution history. Such intrinsic evidence is the most significant source of the legally operative meaning of disputed claim language.

Accordingly, the court will examine all of the intrinsic evidence, the claims, specification and file history, in order to construe the Patents' claims. However, the court cannot use the specifications or the file history to contradict, change, expand, diminish or vary the claims. *Markman*, 52 F.2d at 980. The court will rely on the extrinsic evidence presented to assist in determining the meaning of technical terms in the claims as well as to aid the court to better understand the technology involved.

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[3] The significance of the file history is illustrated by the fact that one cannot rely on an attorney opinion of non-infringement as a good faith defense to a charge of willful patent infringement if the attorney did not consult the file history of the patent for which infringement is charge prior to giving his opinion. *Data scope Corp. v. SMEC, Inc.*, 879 F2d 820, 828 (Fed. Circ. 1989)

II. Construction of Claims

A. Utility Patent or '929 Patent

The Utility Patent is composed of four claims. Claim 1 is an independent claim, and claims 2, 3 and 4 are dependent claims. The dependent claims incorporate every element defined in the independent claim. Accordingly, the Court must construe the dependent claims in a manner that does not alter and is not different from the express limitations in claim 1. 37 C.F.R. Section 1.75. In construing disputed terms in the claims, the court examines the claims from the perspective of "what one of ordinary skill in the art at the time of the invention would have understood the term to mean." *Markman*, 52 F.3d at 986.

The court finds, and the partie do not dispute, the Claim 2 provides that the are of the first, second and third color striations on the backer sheet is one-third each. Further, the court finds that Claim 3 provides that the tabs may vary in color from tab to tab.

The parties, however, dispute the scope of the Utility Patent. That is, they dispute whether the Utility Patent covers only the novel feature of a laminated shingle or the entire shingle. Furthermore, the parties dispute several features of the Utility Patent such as color variation and the characteristics of the dragon teeth or tabs. A discussion of these disputed features is set forth below.

1. Novel Feature of Laminated Shingle Claimed

GAF maintains that the '929 Patent covers the entire shingle rather than what Elk now claims as the novel feature of its patent claim, that is the color striations on the backer sheet. Elk

argues that laminated shingles are so well known to people in the roofing industry that a person skilled in the art would understand that the Utility Patent covers only the novel feature of a laminate shingle, not the entire shingle. The court agrees that a person of ordinary skill in the art of designing roofing shingles would understand that the patent claims only the novel feature, as described in the patent, as opposed to claiming the entire shingle.

Laminated shingles were well known and widely used in the industry by 1991. Since laminated shingles came into existence, the industry has sought to enhance the appearance of these shingles through efforts at creating an appearance or illusion of depth. The language of the claims themselves, as well as the language of the specifications, make clear that Elk is claiming, as the novel feature, color striations on the backer sheet for the purpose of creating an appearance or illusion of depth.

It would have been apparent to one skilled in the art that the drawings in the patent depict laminated shingles. The term "laminated shingles" is used in the title of the patent and throughout the specifications and claims. Additionally, the use of terms such as "headlap", "buttlap", "backer strip", "first sheet" and "second sheet" and "tab" and "dragon teeth" in the specifications and claims are clear references to laminated shingles to one skilled in the art. Further, the patent specifies in several places the importance of the striations on the backer sheet for the purpose of creating the appearance of depth. Thus, an examination of the drawings, the claims and specifications would have made it apparent to one skilled in the art that Elk was not attempting to claim the entire shingle in its patent application.

It is also apparent that the PTO examiner was aware of laminated shingles and was aware that the novel feature claimed by Elk was the addition of color striations to the backer sheet of a laminated shingle. In the reasons for allowance, the examiner noted that there were no "prior art laminated shingles" with color striations on the backer sheet. The examiner further noted that prior art with respect to three tab shingles disclosed color striations, but the prior art "disclosed no motivation to combine" the features of a three tab shingle with a laminated shingle to achieve the results obtained by Elk in its invention.[4] Based on the foregoing, the Court finds that the Utility Patent claims the novel feature of a laminated shingle, not the entire laminated shingle. Specifically, the Court finds that the Utility Patent claims as its novel feature the addition of color striations on the backer sheet of a laminated shingle.

2. Tabs or Dragon Teeth

GAF maintains that claim 1 claims that the tabs or dragon teeth are all the same color or color tonality. Presumably, since claim 3 specifically claims that the tabs have "different color contrasts from one another", GAF's position is that claim 3 should be disregarded since it conflicts with claim 1 to which it is dependent. The court, however, finds no conflict between claims 1 and 3. Claim 1 states that the color of the tabs is "relatively uniform throughout each tab". Col. 6, l. 39-40. However, claim 1 is silent as to the color contrasts between the tabs. The specifications, however, provide that "[i]f desired,

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[4] Three tab shingles or strip shingles are asphalt shingles consisting of a single asphalt coated sheet.

the relatively uniform color portions [of the tabs] may vary in contrast with respect to each other...". Col. 2, l. 20-22.

Reading claim 1 and claim 3 together in light of the specifications, the court finds that the tabs bear one uniform color within each tab. Col. 2, l. 29-30, col. 5, l. 16-22 of '929 Patent. However, the tabs do not all have to be the same color tone. Col. 2, l. 20-22; Col. 8, l.7-9.

3. Meaning of Striations

GAF argues that the term "striations" as used in the claims refers to the portions of the backer sheet visible between the tabs while Elk maintains that the term refers to the bands of color that run horizontally across the entire length of the backer sheet. Some of the language of claim 1 and of the specifications support GAF's position, while other language supports Elk's position. For example, lines 50, 55 and 63 of column 6; line 13 of column 7; and lines 1 and 4 of column 8 use the plural, "striations", in a manner suggesting that the term refers to the area of the color bands visible between the tabs, in the valleys.[5] However, lines 4 through 9 of column 4 and line 1 of column 7 of the Utility Patent use the term in a manner which suggests that "striations" refers to the continuous strips along the length of the backer sheet. Thus, there is an ambiguity regarding the meaning of the term "striations" in claim 1.

In support of its position, Elk introduced deposition testimony of Alfredo Bondoc, a GAF employee, as a person

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[5] Valleys are the portions of the backer sheet visible between the tabs of the overlying buttlap portion of the top sheet.

skilled in the art of roofing shingles. Bondoc testified that he would interpret the claim and the specification to mean that the striations run the length of the backer sheet, due to the manner in which asphalt shingles are made in color drops and the fact that asphalt shingles are uniformly covered in mineral granules.[6] Further support for Elk's position is evidenced by Figures 6 and 7 of the Utility Patent in which ribbon-like continuous horizontal strips are shown on the backer sheet. Finally, the specifications provide that the tabs may have "a square, rectangular, trapezoidal, or any other desired geometric configuration" (Col. 3, l.36-38). However, if the tabs are not square or rectangles, then the visible area between the tabs will not be rectangular in area. The fact, then, that claim 1 refers to striations that are "rectangular in area" supports Elk's position that "striations" must refer to the bands of color that run lengthwise along the backer sheet rather than to the visible areas between the tabs.

Based on the patent as a whole and the testimony presented, the court finds that a person of ordinary skill in the art would understand that the reference to "striations" in the Utility Patent refers to the colored bands or strips underneath the tabs that run horizontally along the entire length of the backer sheet, not merely the across the portions of the strips which are visible between the tabs.

4. Shape of Tabs and Resulting Valleys

Elk argues that the shape of the tabs and the resulting valleys may vary depending on the shape, size and spacing of each tab. GAF maintains that, pursuant to claim 1, the tabs must be

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[6] Dep. Alredo Bondoc, pp. 170-172, 201-203 and 548-550.

uniform in shape and size. GAF contends that the repeated reference to rectangles in claim 1 means that the dimensions of the tabs and dimensions of the valleys must be the same.

The language of claim 4 supports Elk's position that the size, shape and spacing of the tabs may vary. Claim 4 reads:

> ... dimensions of one of said tabs and the openings formed thereby differ from the dimensions of others of said tabs and the openings formed thereby.

The specifications are consistent with claim 4 and support Elk's position. Col. 3, l. 34-38, col. 6, l. 8-10 of '929 Patent.

The drawings illustrating the Utility Patent show trapezoidal teeth that are uniform in shape but not in size. The Court concluded above that the reference to "rectangular area" in claim 1 means the rectangular shape of the horizontal color bands along the length of the backer strip, not the visible valleys between the tabs. Accordingly, the Court agrees with Elk's contention that the tabs themselves are not required to be rectangular and do not have to be the same size.

Therefore, while the shape of the tabs may be of various geometric configurations, all of the tabs must be uniform in shape. Finally, the bottom edge of the tabs must line up with the bottom of the backer sheet.

5. Number of Striations

In the notice of rejection mailed by the Patent Office on May 10, 1994, the patent examiner states that the exact number of striations is not critical to the invention but as a matter of

personal preference. (Office Action mailed May 10, 1994, p.6). The Court agrees as the appearance of depth sought to be created by the claimed invention does not appear to depend on whether there are three or more striations. Additionally, the specifications provide that the number of striations may be varied to provide the desired appearance. Col. 2, l. 33-34, col. 4, l. 10-16 of '929 Patent. The Court thus finds that the Utility Patent may include three or more striations of color.[7]

6. Color or Tonal Value of Striations

GAF contends that the striations on the backer sheet represent three different colors. Further GAF maintains that even if the striations are of the same color family, no relative tonal values for the striations are claimed. Elk advances the position that the striations are composed of relative tonal values of the same color, running from dark, midway between dark and light, and light.

Claim 1 states that the three color striations on the backer sheet form a "color gradation". One definition of "graduation" is a gradual passing from one tint or shade to another, as in a painting. *Webster's Ninth New Collegiate Dictionary* 530 (1983). The Court is free to consult and rely on this dictionary definition. *Vitronics*, 90 F.3d at 1584, n. 6. The Court finds that the specifications teach that the color of the striations on

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[7] The court acknowledges that claim 1 of the '929 Patent describes three striations on the backer sheet. However, the specifications make clear, and the examiner agreed, that the exact number of striations is not critical to the claimed invention. What is critical is the presence of horizontal striations of color tonality going from dark to light on the backer sheet placed between tabs of relatively uniform color. Thus, the specifications do not enlarge or change the concept described in claim 1.

the backer sheet consists of ranges of the same color due to repeated use of language such as"color gradient or gradation from light to dark" (emphasis added). Other language in the specifications suggests that the striations on the backer sheet are ranges of the same color. For example, the specifications state, "Contrast for purposes of this patent application is defined as the degree of difference in the tone or shading between the areas of lightest and darkest color." Col. 4, 1. 18-21 of '929 Patent.

The prosecution history is consistent with the specifications. It provides, "...the present shingles often use the same basic color of adjacent tabs and underlying shingles, with differing light and darkness of the color providing the appearance of shingle depth." Amendment dated July 8, 1994, page 6 of '929 Patent. Thus, the Court finds that the references to color in claim 1 means relative tonal values of the same color, not different colors.

The Court also finds that the patent claims that the striation closest to the headlap is the darkest tone, the middle striation is lighter and the striation along the bottom edge of the backer sheet is the lightest. However, the Court concludes that the patent does not claim any particular relative tonal values for the color striations other than dark at the upper edge, light on the leading or bottom edge, with the middle striation being a tonal value in between the light and dark tones. Col. 4, 1. 6-9. The patent further claims that the contrast in tones may be varied to create the desired appearance or illusion of depth. Col. 4, 1. 28-32.

B. Design Patent or '144 Patent

1. Novel Feature of Laminated Shingle Claimed

Because the '144 Patent is a design patent, the invention is primarily shown by drawings. The claim of the Design Patent states that it claims the "ornamental design for a laminated shingle, as shown and described." As with the Utility Patent, GAF maintains that the Design Patent covers an entire laminated shingle having a specific shape, dimension and configuration, not just the novel feature of a laminated shingle now claimed by Elk. GAF points out that Elk should have indicated the environmental structure or other portion of the Design Patent drawings which was not claimed as a novel feature of its invention. The Manual of Patent Examination Procedure ("MPEP"), provides that any unclaimed portion or environmental structure of an invention may be drawn with broken or phantom lines provided that the use of such broken or phantom lines is explained.

Elk contends that the words of the Design Patent make clear that it covers only the novel features of a laminated shingle, not the whole shingle. For example, the amendment to the Design Patent dated September 13, 1993 states, "Applicants' design invention produces an enhanced ornamental appearance by a unique arrangement of color granules in three striations rather than modifying the physical structure of the shingles." Further, Bondoc testified that he probably would have understood that the Design Patent drawings showed a Bettoli-type laminated shingle if he had seen the Design Patent drawings prior to seeing the shingle.[8] The court agrees that a person skilled in the

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[8] Dep. Alfredo Bondoc, pp. 232, 233, 237 and 238.

art of roofing shingles would understand that the patent claims only the novel feature as opposed to claiming the entire shingle.

As noted in the discussion of the '929 patent, laminated shingles were well known and widely used in the industry by 1991. Since the existence of laminated shingles, the industry has sought to enhance their appearance through efforts at creating the appearance or illusion of depth. In this amendment to the application filed in September 1993, Elk identified the novel feature of its design as the addition of "three striations rather than modifying the physical structure of the shingles." The amendment further provided that the "design uses increased contrast between three striations to produce the illusion of depth in a flat shingle." It is also apparent that the PTO examiner was aware of the claimed novel feature of the application even before the filing of the amendment. The examiner initially rejected the '144 application as obvious under Morgan, a laminated shingle, and Sadler, a shingle described by the examiner as teaching "horizontal strips spaced evenly, midway the face of the shingle..." In the rejection, the examiner noted that the overall appearance of the shingle claimed in the '144 application was "substantially shown by the shingle of Morgan..." The examiner noted it would have been obvious to one of ordinary skill in the art to modify the laminated shingle disclosed by Morgan by adding the horizontal strips taught by Sadler to obtain the claimed design. It is thus apparent that the examiner understood the application was not claiming the entire shingle and understood the claimed novel feature of the application. The court concludes that a person skilled in the art of roofing shingles would understand the '144 patent application to encompass only the novel feature of a laminated shingle rather than claiming the entire shingle.

2. Meaning of Stippling

GAF argues that the strippling, shown in the drawings of the '144 application, connotes texture, not different colors, or ranges of the same color, nor a gradual fading of the same color. Elk contends that the stippling shows a range of the same color progressing from light to dark.

GAF relies on the Guide for the Preparation of Patent Drawings ("GPPD"), Guide for Patent Draftsmen ("GPD"), Symbols for Draftsmen ("SD") and the MPEP to support its position. The GPPD indicates that color should be shown by means of shading using a specific drafting symbol pattern for each color. The limited number of references to 'stippled" and "stippling" in the GPD suggest that stippling may be used as shading to show irregular or abrasive surfaces. The SD shows that stippling is conventionally used to show loose sand or adhesive. The SD provides that the collection of symbols is not exhaustive and other symbols may be used as long as they are clearly identified in the specifications and do not create confusion. GAP presented the testimony of an expert in the field of Patent Office procedure, Mr. Foley, who testified that a patentee was not, to his knowledge, permitted to use stippling or other symbols for any purpose other than the purpose set forth in the written guidelines unless such purpose was disclosed. GAF charges that Elk failed to indicate that it sought to use stippling to show color in any way in the patent itself.

Mr. Dillon, the draftsman of the Patents, admitted that to the best of his knowledge he had never previously used stippling in any other drawing to show a color gradient. Mr. Dillon even used different cross hatching patterns to show color rather than stippling in two figures of the Utility Patent.

Elk urges that stippling is used by people of ordinary skill in the art of designing roofing shingles to show color value or tonality. Elk presented testimony regarding U.S. Patent No. 309,027 ("Noone") which shows darker and lighter coloration of the granules via stippling.[9] The prosecution history clearly supports Elk's position that the stippling denotes color value. The amendment filed by Elk states that the ". . .invention produces an enhanced ornamental appearance by a unique arrangement of colored granules in three striations rather than modifying the physical structure of the shingles." Amendment dated September 13, 1993, page 3 of '144 Patent. Later, the amendment states "An important feature of Applicant's invention is providing contrasting striations of the same color." Amendment dated September 13, 1993, page 4 of '144 Patent.

The SD provides that a patentee is free to use whatever symbols it chooses in the claims of a design patent, as long as the meaning for such symbols is clearly defined where it deviates from conventional usage. 37 C.F.R. Section 1.84: GPD at p. 16. The Design Patent prosecution history makes repeated references which clearly put the world on notice that Elk intended for the stippling to show color, not texture. Even though Mr. Dillon has not used stippling to show color in other patent drawings, certainly other patent draftsmen have don so. *See, e.g.*, U.S. Patent No. 2,036,329 ("Giles"). Finally, prior art references cited in the Design Patent discuss the utilization of color, not texture, to create depth.

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[9] Dep. Alfredo Bondoc, pp. 144-147.

3. Headlap

GAF maintains that the headlap portion of the shingle is plain, flat and has a smooth surface with no granules and no texture or color. Elk claims that the headlap portion of the shingle forms no part of the claimed ornamental design because, like any other laminated shingle, the headlap portion is entirely functional and arbitrary in appearance and hidden from view. Further, Mr. Bondoc testified that all laminated shingles are uniformly covered in granules in order to cover the asphalt coating.[10] It is apparently Elk's position that a person skilled in the art would understand that the headlap is covered in granules in order to cover the asphalt coating. GAF argues that if the headlap was not intended to be part of the novel feature of the invention, the claims should have been drawn to reflect this fact.

In the initial rejection of the application, the patent examiner noted that the headlap portion of the shingle was not shaded. The examiner stated that flat surface shading was required to show the character of the surface and required Elk to amend its application in order to better reflect the character of the headlap's surface. Elk amended its application to comply with the examiner's request. Considering all of the evidence, including the uncontradicted testimony of Mr. Bondoc that asphalt shingles are uniformly covered in granules, the Court finds that the headlap is uniformly covered in granules to cover the asphalt coating.

Additionally, the court agrees with Elk that the headlap forms no part of the claimed ornamental design. Thus, the

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[10] Dep. Alfredo Bondoc, pp. 53, 55-56 and 59.

court does not agree with GAF's argument that the '144 design patent claims six severely elongated rectangles along the bottom of the headlap.

4. Shape and color of tabs

The Court finds that the tabs on the buttlap portion are elongated trapezoids having the same shape and angles. However, the tabs do not all have to be the same size. The drawings in the application depict tabs which are all trapezoid shaped but which are not the same size. Further, each tab is of uniform color, but the tabs may vary in contrast of color from each other.

5. Appearance of backer strip

GAF asserts that an ordinary person or even a person skilled in the art would not be able to discern the appearance of the backer sheet from the Design Patent drawings. Elk's witness and employee, Mr. Kiik, who is skilled in the art of laminated roofing shingles, testified that a person familiar with laminated shingles would know that the granules on the backer strip were continuous. The court agrees. The Design Patent covers a laminated shingle. The term "laminated shingle" is well known in the industry and was known to the PTO examiner who examined the application. Bondoc, GAF's employee who is also skilled in the art of laminated roofing shingles, stated in his deposition testimony that asphalt shingles are uniformly covered in mineral granules.[11] GAF did not contradict this evidence nor provide evidence that laminated shingles are made in some other manner. The court finds that the textured

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[11] Dep. Alfredo Bondoc, pp. 53, 55, 56, and 59.

granules continue in strips along the backer sheet. In other words, granules are located underneath the tabs in addition being located in the valleys where the granules are visible.

SO ORDERED this 29th day of September 1997.

JORGE A. SOLIS
UNITED STATES DISTRICT JUDGE

APPENDIX E

ELK CORPORATION OF DALLAS, Plaintiff-Appellant,

v.

GAF BUILDING MATERIALS CORPORATION, Building Materials Corporation of America d/b/a GAF Materials Corporation, and GAF Materials Corporation, Defendants-Appellees

98-1369

UNITED STATES COURT OF APPEALS
FOR THE FEDERAL CIRCUIT

1999 U.S. App. LEXIS 8547

April 16, 1999, Decided

April 16, 1999, Filed

A combined petition for rehearing and suggestion for rehearing in banc having been filed by the APPELLANT, and a response hereto having been invited by the court and filed by the APPELLEES, and the petition for rehearing having been referred to the panel that heard the appeal, and thereafter the suggestion for rehearing in banc and response having been referred to circuit judges who are in regular active service,

UPON CONSIDERATION THEREOF, it is

ORDERED that the petition for rehearing by, and the same hereby is, DENIED and it is further

ORDERED that the suggestion for rehearing in banc be, and the same hereby is, DECLINED.

The mandate of the court will issue on April 26, 1999.

Dated: April 16, 1999

APPENDIX F

37 C.F.R. Ch. 1 (7-1-98 Edition)

§ 1.56 Duty to disclose information material to patentability.

(a) A patent by its very nature is affected with a public interest. The public interest is best served, and the most effective patent examination occurs when, at the time an application is being examined, the Office is aware of and evaluates the teachings of all information material to patentability. Each individual associated with the filing and prosecution of a patent application has a duty to disclose to the Office all information known to that individual to be material to patentability as defined in this section. The duty to disclose information exists with respect to each pending claim until the claim is canceled or withdrawn from consideration, or the application becomes abandoned. Information material to the patentability of a claim that is cancelled or withdrawn from consideration need not be submitted if the information is not material to the patentability of any claim remaining under consideration in the application. There is no duty to submit information which is not material to the patentability of any existing claim. The duty to disclose all information known to be material to patentability is deemed to be satisfied if all information known to be material to patentability of any claim issued in a patent was cited by the Office or submitted to the Office in the manner prescribed by §§ 1.97(b)-(d) and 1.98. However, no patent will be granted on an application in connection with which fraud on the Office was practiced or attempted or the duty of disclosure was violated through bad faith or intentional misconduct. The Office encourages applicants to carefully examine:

(1) Prior art cited in search reports of a foreign patent office in a counterpart application, and

(2) The closest information over which individuals associated with the filing or prosecution of a patent application believe any pending claim patentability defines, to make sure that any material information contained therein is disclosed to the Office.

(b) Under this section, information is material to patentability when it is not cumulative to information already of record or being made of record in the application, and

(1) It establishes, by itself or in combination with other information, a prima facie case of unpatentability of a claim; or

(2) It refutes, or is inconsistent with, a position the applicant takes in:

(i) Opposing an argument of unpatentability relied upon by the Office, or

(ii) Asserting an argument of patentability.

A prima facie case of unpatentability is established when the information compels a conclusion that a claim is unpatentable under the preponderance of evidence, burden-of-proof standard, giving each term in the claim its broadest reasonable construction consistent with the specification, and before any consideration is given to evidence which may be submitted in an attempt to establish a contrary conclusion of patentability.

(c) Individuals associated with the filing or prosecution of a patent application within the meaning of this section are:

(1) Each inventor named in the application;

(2) Each attorney or agent who prepares or prosecutes the application; and

(3) Every other person who is substantially involved in the preparation or prosecution of the application and who is associated with the inventor, with the assignee or with anyone to whom there is an obligation to assign the application.

(d) Individuals other than the attorney, agent or inventor may comply with this section by disclosing information to the attorney, agent, or inventor.

§ 1.153 Title, description and claim, oath or declaration.

(a) The title of the design must designate the particular article. No description, other than a reference to the drawing, is ordinarily required. The claim shall be in formal terms to the ornamental design for the article (specifying name) as shown, or as shown and described. More than one claim is neither required nor permitted.

(b) The oath or declaration required of the applicant must comply with § 1.63.

APPENDIX G

UNITED STATES COURT OF APPEALS
FOR THE FEDERAL CIRCUIT

ELK CORPORATION
OF DALLAS

versus

CIVIL ACTION
NO. 98-1369

GAF BUILDING MATERIALS
CORPORATION AND
BUILDING MATERIALS
CORPORATION OF AMERICA

TRANSCRIPT OF ORAL ARGUMENT

January 5, 1999

Judge Michel: 98-1369 Elk Corporation v. GAF Building Material Counsel we would like to proceed just as soon as you can be ready.

Mr. Murnane: Good morning Your Honors, may it please the Court. The district court's decision was not in accord with the decisions of this Court and should be reversed. The *Kimberly Clark* and

Halliburton decisions of this Court require that the key issues of materiality and intent should be decided with reference to the claimed invention. The district court did not look at the claimed invention as a whole, rather the court first looked at the structure for the shingle and then at the coloration thereon, concluded that inequitable conduct had occurred because Bettoli was most pertinent with respect to structure and Giles was as most pertinent or as pertinent as any other reference with respect to coloration.

Judge Rader: Mr. Murnane? I was particularly taken that these cases so often turn on intent which we have said is a very high requirement. I was taken by the District Judge's statement, the reasons given by Elk for not disclosing material

prior art are not credible nor objectively reasonable. What are those reasons?

Mr. Murnane: Your Honor the reasons are that Elk believed, that Mr. VanWinkle believed, that he disclosed the most material prior art, the most pertinent prior art when he disclosed the Noone reference. This invention is a rather ingenious way of imparting the allusion of depth to a shingle by putting adjacent to a uniform portion of a shingle, a region that has a uniform color, a portion of a shingle a region with different coloration. The only prior art reference to do that was the reference that Mr. VanWinkle put in which was the Noone patent. This patent which was the first patent issued to anybody with coloration where you have more than one region of coloration adjacent to a region of

uniform coloration was believed by Mr. VanWinkle --

Judge Rader: Do you think Bettoli, Giles and High Sierra were material?

Mr. Murnane: No Your Honor I do not.

Judge Rader: Why did they show up in the search report?

Mr. Murnane: They showed up in the search -- well firstly, Bettoli did not show up in the search report, GS High Sierra did not show up in the search report. Giles did show up in the search report, Your Honor.

Judge Rader: Why was something that was in the search report not disclosed, particularly when counsel, both Felger and VanWinkle I think admitted that they characteristically disclosed everything that's in the search report? Why did they not disclose Giles?

Mr. Murnane: Mr. Felger testified that he usually does. Mr. VanWinkle testified he frequently does not. Mr. VanWinkle was of the view Your Honor that the best search was done by the Examiner when the Examiners searched the Noone case. No IDS had been presented to the Examiners in Noone. Mr. VanWinkle testified he thought Noone was the best prior art and that all the art disclosed therein was the best prior art. Now interestingly, Your Honor Mr. Felger did disclose Giles in the '929, in the utility application. Counsel say on page 13 of their brief that Giles and Bettoli were only disclosed after GAF raised the inequitable conduct defense, that is not so. They were disclosed at the very beginning of the '929 case, Bettoli was cited by Mr. Felger in the specification, it was

also cited in the IDS, it was filed the first day, that application was filed before this patent even issued. And he cited Giles in the second IDS in March of '94. Interestingly, the Utility Examiner in the first official action did not cite either Giles or Bettoli against a laminated shingle claim. He didn't cite Bettoli against any claim in the first official action the '929 case, Bettoli [sic, Giles] was cited against a broad claim which also included strip shingles.

Judge Michel: Why are you defending based on the utility application?

Mr. Murnane: Your Honor -- the question was --

Judge Michel: The materiality issue has to do with the design application.

Mr. Murnane: The question raised by Judge Rader was what would be the basis for saying they were not material Your Honor --

Judge Michel: That's why I'm trying to get back to that, because it seems to me the core of that question at the heart of this case and I frankly haven't heard much of an answer to it yet.

Mr. Murnane: Okay. The question Your Honor is what would a person and here we have knowledge of materiality as well as materiality okay, and the claims in the utility case are a little broader than the design case. But there is a similarity in those claims. The design Examiner -- excuse me -- the utility Examiner had the same view of that art as Mr. VanWinkle did. The utility Examiner didn't cite it against these claims even though these claims are quite similar, a little

broader. Mr. VanWinkle had a view, he said he was taught to cite the best prior art and that's what he did. He felt that he did that.

Judge Michel: Well maybe he did cite the best prior art. Let's assume that we conclude that he did. How does that meet the duty?

Mr. Murnane: Well Your Honor in the *Halliburton* case you recall no prior art was cited by the applicants there.

Judge Michel: No but the requirement is that all the material art be cited and it's not a defense to say well there were 20 pieces of material art but one was more material than the others, we cited that one and we left out the other 19. That doesn't meet the duty of candor to the PTO.

Mr. Murnane: That's not Elk's defense Your Honor. Elk's defense --

Judge Michel: Well then I don't understand anything you've been saying.

Mr. Murnane: I'm sorry Your Honor. Elk's defense is these individuals said that they did not believe the art was material and that is objectively demonstrated by the actions of other people. And we say the district court did not look at that other evidence. Take a look at all the other evidence --

Judge Rader: You say it's not material and yet you cite it in the co-pending utility application, you find it in your search report, your inventors speaking to each other cite Giles as "of special importance," all these things tend to underscore what the district court said your reason for not disclosing, was either not credible or not objectively reasonable.

Mr. Murnane: Your Honor has pointed to a piece of the district court's decision which we believe is clearly erroneous. The district court decision says of all the references listed in the search report and there were five that were specifically discussed, Mr. Weaver mentions only Giles and says it's of special interest. Your Honor we have pointed out that he didn't do that. In two and a half lines he talks about Giles. In eleven and a half lines he talks about Noone and he went out and ordered the Noone file history and gave it to Mr. Kiik. He didn't think only Giles was of special interest. He thought they both were and this was of such interest that they went out and got the file history. These people the CertainTeed --

Judge Rader: But he did think Giles was of special importance?

Mr. Murnane: He did Your Honor.

Judge Michel: Your position is that it's not even material under the very minimal definition of materiality that's in the patent rules and is supported by our case law?

Mr. Murnane: No Your Honor? Because --

Judge Michel: Not material?

Mr. Murnane: No Your Honor. The reason being it does not together or with something else render the claim unpatentable.

Judge Michel: Yeah but that's not the test. The test is whether a competent examiner would have felt that being able to look at this reference was important. Not whether it would be dispositive not whether it was the cause of rejection or allowance but merely whether it was material enough that he would want to see it.

Judge Plager: That is that it spoke, it spoke to validity it didn't decide the question.

Mr. Murnane: Understood Your Honor, and again we have here what happened in the utility case when the Examiner had before GAF's arguments were presented to the Examiner, when the Examiner had the virgin view of this art that was put forward, no laminated shingle claim, this is a laminated shingle we have here, no laminated shingle claim was rejected in view of Bettoli, or Giles in combination with anything.

Judge Michel: But how is that responsive to what Judge Plager just said. It's not the dispositive quality it's just the relevance that controls here.

Mr. Murnane: Well Your Honor, assuming that I am incorrect and assuming that the individuals were incorrect in their belief that it was not material --

Judge Michel: We don't have to assume, we have findings by a trial judge and rather extensive record undergirding the finding and unless you can show us that those findings are really what a fifth grader would call wacked out, I don't see how we can reverse.

Mr. Murnane: Well Your Honor --

Judge Michel: You're not retrying the case here.

Mr. Murnane: Understood Your Honor. You have materiality that's one component. The next component is knowledge of materiality and we go back to Judge Rader's first question, how we can say that the district court was wrong in saying that the explanation of Elk was not credible. The district court did not look at all the evidence which Akron Polymer requires the district court to do. The district court did not look at what did

GAF witnesses do when they were faced with this invention?

Judge Michel: What do you mean, what this district court didn't look at? What are you saying?

Mr. Murnane: There is not one mention in this decision --

Judge Michel: Oh you mean it's not in the opinion. That's not the same as the district court didn't look at it, didn't consider it, it just means it wasn't commented on in the opinion. Not everything is commented on in an opinion.

Mr. Murnane: This was an enormous amount of evidence Your Honor. I would like to call back to *Akron Polymer* where this Court said that the district court extensively cataloged the evidence, enumerated the evidence but did not weigh it. Here we don't even have a mention of it. We had a meeting at DFW Airport just prior to the

issuance of this patent. GAF had filed a declaratory judgment action, they were contending this patent would not be valid. They jumped the gun a little fast, was contending this patent would not be valid. They didn't mention Bettoli, their own shingle, they had a Giles type shingle. They had a laminated Giles type shingle. You're going to see Exhibit 242 which they're going to bring up here which they've put together. They say it's a combination of Giles and Bettoli. It's not I can show you the pages later on in my rebuttal I'll point to the pages that show it's not a combination of those two. But anyway, they didn't bring up any of that evidence. The fact that our people had these views as to the relevance of this art is corroborated by their people. They have a 100

years experience in this--this was their art. They brought up --

Judge Michel: What is your point? That if its the view of some third party that that's dispositive and binds the fact finder who has to answer the question what would the average Examiner find important for purposes of his analysis, objectively determined.

Mr. Murnane: No Your Honor. My point is when credibility is weighed, if someone says this is so, we should not ignore the very compelling evidence of the other party which is in agreement with that position. In addition, Your Honor we have materiality, we have knowledge of materiality, we have intent. It would have been inconceivable had there been a plan to withhold this uncited art, it would have been inconceivable to put in the other things that they

put in. If in fact Mr. VanWinkle and once again it's important to note, Elk gave up all the art to Mr. VanWinkle and Baker & Botts. They gave it all over. Mr. VanWinkle a year before retirement, he's going through this, if he has this plan all on his own for whatever reason to commit inequitable conduct, why is he putting in art which is going to blow the whistle on him? Why is he putting in the Johns Manville shingle? Now they say you can't tell what that means. These Examiners knew very well what that meant. These Examiners had been told one year earlier by the Board of Appeals in the Noone case exactly what that Manville shingle was. Why would he do that? Elk was very aware of the Woodlands Shingle. Woodlands had been a private label --

Judge Michel: Let me stop you for just a minute. Ms. Thomason is he down to 2 minutes and a half total or of his initial argument?

Clerk: He's already into rebuttal.

Judge Michel: He's already into his rebuttal, Mr. Rosen.

Mr. Rosen: Thank you Your Honor. May it please the Court. I would like to start by answering the questions that Judge Rader asked of my adversary. Judge Rader said with Bettoli and High Sierra and Giles in the search report, why didn't you disclose it? And my adversary said they weren't in the search report. Giles was, High Sierra and Bettoli was not. He's partially correct in this respect. When Mr. Weaver the inventor ordered the search report from the Nies firm he said I want a patentability prior art search and by the way I already know about

Bettoli, here's the seven digit patent number because of course Elk was a licensee under Bettoli. So correct it is not in the "search report" because the inventor said to the search firm don't bother looking for Bettoli I've already got it. Second thing, why isn't High Sierra in there? High Sierra is non-patent prior art. Five times in Elk's briefs to this court starting on page 5, my adversary says "there is no evidence in the record that Elk knew about the High Sierra shingle. Your Honor I respectfully refer the court to the following: (1) Mr. Kiik testified he knew about High Sierra shingle before they filed this patent. (2) Mr. Weaver testified he knew about it. (3) Mr. Weaver said the plant is right across the road from ours in Ennis. (4) When counsel raised

this very issue before the district court and said that High Sierra only shows black we came in with an affidavit, an affidavit of the president of GS saying no it's not black, it's whatever the color of the shingle is and counsel stipulated to that. To put in his brief, five times and there are two briefs "there is no evidence in the record Elk knew about High Sierra is simply appalling.

Judge Michel: Let's not get into litigating the candor of counsel's brief. Just restrict yourself to helping us understand what the true facts are or we'll get into ad hominem back and forth.

Mr. Rosen: Okay. Let me answer Judge Rader's question about I think the first question posed to my adversary was what is it that the district court did not credit. Mr. VanWinkle. Mr. VanWinkle testified at deposition in this case

early on before the crime fraud order before we got all these documents that Your Honor referred to, and he said I don't know Bettoli, I never heard of Bettoli, what's a Bettoli, I don't have any recollection of anything that happened in this. I filed this in 1991, I retired in '92 and in 1995 he claimed no recollection of this. When he got to trial Mr. VanWinkle had an epiphany on the stand he said now I remember Bettoli I considered it and rejected it. Giles I considered it and found it to be what's relevant in other prior art. Second witness from Elk. Mr. Felger. Mr. Felger testified that he knew about Bettoli not at the DFW meeting. Three or four days later he filed an amendment to add prior art between the time of the notice of allowance and the time of the issuance of the

patent and never disclosed Bettoli. And now Your Honor if I may say --

Judge Rader: Mr. Mr. Rosen?

Mr. Rosen: Yes. I apologize Your Honor.

Judge Rader: The key often in these cases as we have discussed before is intent and gross negligence even grossly being negligent is not enough. You've got to find that there was an intent to deceive.

Mr. Rosen: Yes Your Honor.

Judge Rader: Where is this intent? I see a lot of negligence here, a lot of overlooking things. What would you say is the heart of the intent?

Mr. Rosen: Okay let me address that and it is an issue which I refer to is either defensive patenting or defensive infringement patenting. Your Honor let me address it in the following respect. We

have to go back to the Summer of 1991. Elk is going to market with its new product. It has sought a patent prior art search. It knows about Giles, Bettoli and High Sierra. At that point in time before an application was filed in September 1991 an intervening event of major importance occurs. That intervening event is that CertainTeed, another competitor, having obtained the Noone patent, writes to Elk and says your new shingle on the market infringes our patent. All of a sudden Elk's principal concern is uh, oh, how are we going to fend off a claim of infringement by CertainTeed. What happens? They file an application in September '91 Your Honor and the prior art disclosed in the IDS on the '144 is Noone and precisely the prior art disclosed in Noone. No more, no less.

Not a single reference left out, not a single reference added. We understood what that meant. We understood that the position whether credible or not is how do you overcome a claim of infringement by CertainTeed, you get a patent issued over CertainTeed. But you have to disclose only the same amount of art because if you leave out some art that was before the Noone Examiner then CertainTeed can say that your patent is no good you left out some prior art. If you disclose anything beyond Noone, like Giles and Bettoli you run the risk of the Examiner rejecting your application, you don't have your patent as a "defense to infringement."

Judge Rader: I take it that all that adds up to under your view or characterization of the evolving

circumstances, they would have an incentive to leave out - what they left out

Mr. Rosen: It's more than that. It's more than merely incentive. I'll tell you why Your Honor. This is a peculiar species of inequitable conduct because this inequitable conduct I'm talking about is a total repudiation of your obligation to disclose prior art relevant to your application and at trial Mr. Felger admitted it, at page A1632. We went through this, this defensive patenting and I must read this to you because this is the key to what happened here. Question:" So that explains why the art cited in the IDS in the '144 is exactly the same. No more, no less than in Noone patent. Is that right?" Answer by Mr. Felger. "Yes I believe the threat of litigation was the cause of that." It

is not simply motive Your Honor, it is also another species --

Judge Rader: But you said that the reason they didn't add the others was they feared they would get rejected. Didn't this district judge find that even if all this art were in the record it would have been patentable under 103?

Mr. Rosen: No because what the district court found was he thought that he didn't think it was obvious and he thought they could overcome the obviousness but the reason for that is because in the later prosecution in the CIP utility they submitted to the Patent Office to overcome an initial rejection of obviousness evidence of commercial success and other secondary factors, never submitted, never submitted to the design patent Examiner. And the district court judge is

of the belief and I believe it is gratuitous or if you will dicta that had they disclosed these items, that they would have succeeded. In terms of materiality Your Honor, I only have one to show you. This is Giles as described in the Giles patent. You could do it with paint or granules, a dark, a light and where the two meet in the middle forms a third. A color gradation dark, medium and light. This is Bettoli. And Elk's witnesses sat before this district court judge and said, we still think that Noone is more material prior art and is closer to our invention than is this. One last point on this subject Your Honor and that is as follows: opposing counsel argued below and does argue here that the reason he thinks or Elk thought Noone was more relevant is because of the function of the

design. The function being to create the allusion of depth in a flat shingle. This Court has held and I believe Judge Michel you wrote the opinion *In re Harvey* in 1993, when you are dealing with a design patent the relevant prior art is appearance and not function. And that was an issue. It's an argument that opposing counsel made to the district court time and again and is made to this Court in these briefs.

Judge Michel: Again why do we care what's more material? The only question is whether what was omitted with material?

Mr. Rosen: Well the reason is because Elk has to satisfy both standards. The standard Your Honor articulated, Judge Michel in response to my adversary's question about what's important to an Examiner, is the standard that applied at the

time that this application was filed in September of 1991. Effective March 16, 1992, Rule 56 was amended to apply the standard of anything that alone or in combination would make a prima facie case of non-patentability. Elk was under both standards because the first standard applied when they made the IDS in March, in September of 1991 and then the second standard picked up. They had to satisfy both standards. If they violated either one during the relevant time periods they committed inequitable conduct. Let me address the second issue of inequitable conduct that the district court found and this is Rule 56(b): separate and apart from what was withheld in the IDS, Rule 56(b) effective in March of '92 says as follows: If you withhold a prior art reference not by

inequitable conduct, not with intent to deceive even negligently, if you withhold the prior art reference you may not make arguments for patentability or over an Examiner's rejection which you could not have made had you disclosed that reference. This is the -- what the 56(b) part which is what we call I guess you got to stay honest with he Patent Office. Even if the original withholding of Bettoli was not with deceptive intent, when it came to 1993 and Mr. Felger argued to the patent Examiner to distinguish Morgan the structural prior art that the Examiner used to reject the patent application. He made the argument that Elk's invention was different from Morgan in three ways, every single one of those ways is taught by Bettoli.

Judge Rader: Alright. Well so he may have violated the rules but the issue is unenforceability for inequitable conduct which isn't necessarily co-terminus with every part of the rule.

Mr. Rosen: Well I think it is in this respect because 56 says that material --

Judge Michel: Are you saying that if somebody makes an argument in the circumstance you told that that by itself renders a patent unenforceable for inequitable conduct?

Mr. Rosen: If the argument was material that's the language of 56 -- the materiality includes --

Judge Michel: No I understand it's the language of 56 but is it the language of our case law? Do we hold anywhere that anything that violates 56 meets the test of unenforceability?

Mr. Rosen: No Your Honor.

Judge Michel: I didn't think so.

Mr. Rosen: No absolutely not. But the district court judge based on the credibility of the witnesses before him and witnesses who told different stories at different times, the credibility determinations of the district court judge included as a determination of inequitable conduct the disclosure I'm referring to or the argument I'm referring to that was made to the Examiner in 1993 in violation of 56(b). It wasn't a per se determination of inequitable conduct. Let me make one or two other points. This Court has said many times and it's carrying coals to Newcastle for me to cite particularly to this panel the proposition that substantial deference will be given to the credibility determinations to the district court judge. *Goodyear* and

Pharmaceutical, *Key Pharmaceuticals* are just two of the most recent cases etc.

Judge Michel: You can say more than that. You can say they are virtually unreviewable.

Mr. Rosen: That's why I say I feel like I'm carrying coals to Newcastle --

Judge Michel: Don't tell us the basic law. We know what the cases hold, we know what the standards are.

Mr. Rosen: Your Honor the next point I wanted to make was as follows: With respect to the seven different instances of inequitable conduct that we alleged before the district court, it is true that the district court found two of them as stand alone instances of inequitable conduct and rejected five as not meeting our burden of clear and convincing evidence, that is correct. But what is inescapable is that the district court

heard the testimony of these very same witnesses with respect to each of the seven and that is of critical importance in terms of the overall gestalt or credibility determinations if you will that the district court made. Let me give you an example. Mr. Felger testified at trial respecting inventorship fraud that there was never any quid pro quo between he and 3M to add Stapleton as an inventor, 3M's Stapleton, in return for or as a quid pro quo that 3M assigned their rights. That's what Mr. Felger testified to. Mr. Felger was impeached at trial by his own letter to 3M counsel which said, if you tell me in writing you will get the assignments signed by 3M to this invention and send them to me, if you represent in writing you're going to give me those assignments then I will proceed to file the

amendment to add Mr. Stapleton. That's the kind of evidence that, while it does not go to the two frauds that the district court had before it, is evidence that the district court had from these very same witnesses for whom the district court was obliged to consider and determine their credibility. I want to mention just quickly one or two of the other frauds because I believe that the decision in addition to being correct is sustainable, or it should be affirmed on one or two other grounds. One, --

Judge Michel: Are you asking us to find charges of inequitable conduct here on appeal that were not found by the court alone?

Mr. Rosen: Yes Your Honor to the extent they all involve credibility?

Judge Michel: What authority do we have to do that?

Mr. Rosen: Well Your Honor because a decision of the district court --

Judge Michel: We are reviewing what he did rely on. We are not deciding some things he didn't rely on.

Mr. Rosen: Your Honor I beg your pardon, perhaps I misunderstood the law of this Circuit but my understanding was that any ground on which the district court's decision can be affirmable is one that may be argued to this Court.

Judge Plager: I understood your argument to be that there was a pattern of conduct and behavior that would influence the trial judge's view with regard to the two specific issues that we have before us, that's all you were saying isn't it? You're not asking us to open up those other issues?

Mr. Rosen: That's correct. That's correct.

Judge Michel: We have all that in your brief. Your time has expired. Thank you. Mr. Murnane.

Mr. Murnane: Thank you Your Honor. I had mentioned Your Honor that I would identify that page, it's A06496 which indicates that it was May 1994 that GAF advised Elk of its inequitable conduct charge and Elk had advised the Patent Office in the '929 case in advance of that date, months in advance of that date of the art. Your Honor counsel has held up defendant's Exhibit 242 and has used language which the district court used when talking about the backer strip, talking about color striations. The district court has a finding and it's clearly erroneous that this backer strip shows striations. Counsel said you see them here dark, medium and light. We would invite attention Your Honors to the actual

exhibits. We would invite attention to the real Giles which is in Volume 2 of the Joint Appendix page 2713 and the real Bettoli which is in Volume 3, page 4273. If you look at the real Giles you won't see striations. You won't see in the pictures striations. You won't see in the text striations. You won't see that Mr. Giles had any awareness of three striations. He talks about colors gradually toning together and he talks about two. He described two, he depicted one fade and he claimed two. So the district court's finding is clearly erroneous with respect to color striations. It's just not there. With respect to counsel's comment concerning GS High Sierra, we say repeatedly in our brief that no Elk witness was aware of a GS High Sierra shingle with a shadow line which had a darker

band of the color rather than a black band. That's again corroborated by the GAF experience. We pointed out that Dr. LaPalme, their head scientist, who wrote to the president, Mr. Sergey, so concerned about the Noone patent, so concerned about the Noone patent they were going to cease manufacturing and marketing their black band laminated shingle and in his handwritten memo which we cited in our papers, he says other companies risk suit. First company he mention GS, he didn't say GS doesn't have to worry about it, they've got a different kind of shingle. Everybody regarded it as such until an affidavit was handed in at the end of trial. The judge himself said it looked black to me until you showed me the affidavit. With respect to Mr. Felger, and the testimony

that was just read about Mr. Felger he was not the attorney who prepared the IDS of the application. He came in later on so he's just surmising as to whatever Mr. VanWinkle did. And with respect to Mr. Felger's comments concerning the Morgan tabs those are 100% accurate, Morgan emphasized in his patent that you can make a shingle look like a wood shingle with real depth by extending the tabs.

Judge Michel: Counsel you are over your time. You are going to have to draw this to a close.

Mr. Murnane: Okay. He extended the tabs and gave a real shadow. We use color. That's not an obvious choice. That's my point Your Honor. Thank you.

Judge Michel: Thank you very much we will take the case under submission. That concludes the argument for this morning.

APPENDIX H

ELK

May 16, 1991

Mr. Fred Bergert
Nies, Kurb, Bergert and Tamburro
Suite 706
2121 Crystal Drive
Arlington, VA 22202

Dear Mr. Bergert:

Enclosed please find a description of two (2) shingle products which we plan to introduce within a year. I am requesting that you begin an initial patentability search on each of these products. It is my understanding that we will be billed $500 to $600 for each search.

Sincerely,

/s/
Paul Weaver
Process Control Manager

PW:slm

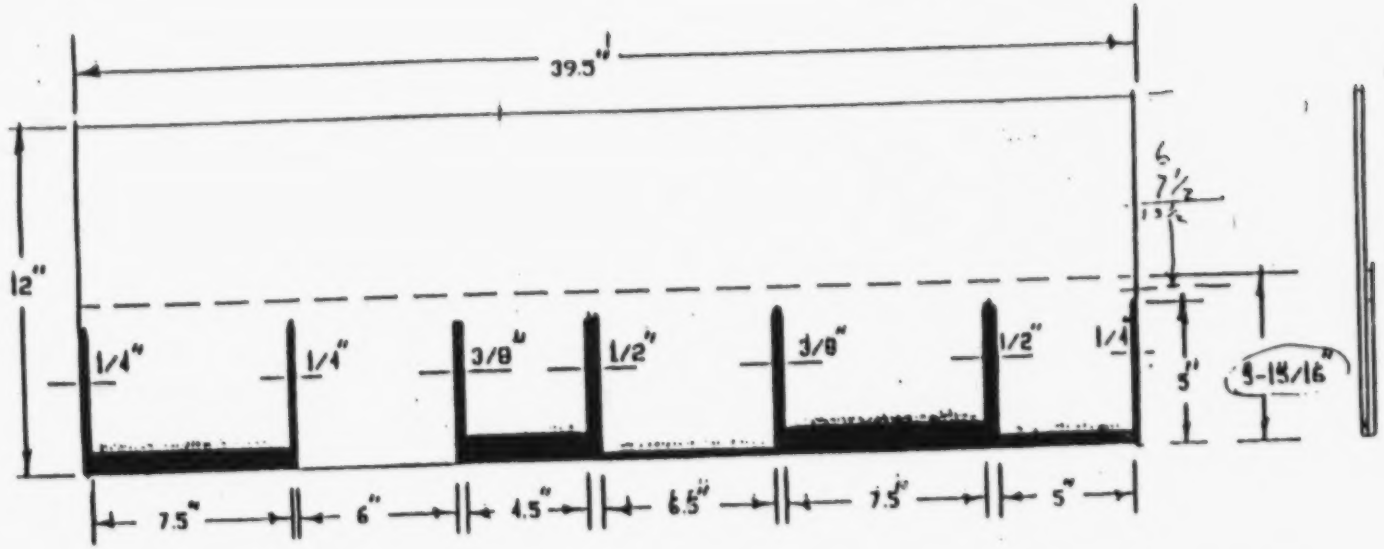
encl

cc: Bob Pine
Mike Kiik

PRODUCT NO. 1: TUSCALOOSA T-3

The enclosed sketch describes this product's appearance. This shingle's construction is similar to the one described in Bettoli's patent No. 3,921,358 which is also enclosed. The main difference is that our product tries to simulate the appearance of slate, not wood shingles.

TUSCALOOSA T-3



10 APART

PRODUCT NO. 2: "STRIATION"

The uniqueness of this product is in regard to the application of different color granules, as shown in the enclosed sketch. The bands of dark, medium, and light granules simulate shadows and highlights, thus giving the shingle an increased allusion of depth. Several of our competitors use a black or dark shadow line , but we know of no one using a shadow and highlight lines.

BEST AVAILABLE COPY

APPENDIX I

U.S. Pat. No. 3,613,328
to Morgan, Jr. et al.

ABSTRACT OF THE DISCLOSURE

A laminated, mineral-surfaced, asphalt strip shingle, which, when laid in courses on a roof, simulates the irregularity and attendant shadow effects found in wood shingles, while complying with Underwriters' Laboratories, Inc., standards for fire retardant asphalt shingles. The laminated shingle comprises an overlay lamina of asphalt roofing composition, of full width and length dimensions, with widely spaced cut-out tabs in its exposed area as applied on a roof, said cut-out tabs being of generally rectangular shape, and each being of different width and length. An underlay lamina, constituted by a narrow sheet of the same asphalt composition roofing material with no cut-outs, is laminated adhesively to the underside of the overlay lamina, filling the spaces between the tabs of the overlay lamina and providing tab-simulating areas between said tabs. The tabs of the overlay lamina overhang the lower edge of the underlay lamina, and the underlay lamina is shifted laterally with respect to the overlay lamina by a small amount to cover the butt joint between adjacent underlay laminae in the same course. Vertical alignment marks are provided, such that the underlay lamina overhangs the tops of the cut-outs between tabs of the overlay lamina in the next lower course. A plurality of horizontal laying marks, differently spaced, are provided to create a laying program, which avoids the appearance of repetitive or directional patterning.

Oct. 19, 1971 A. R. MORGAN, JR., ET AL 3,613,328
LAMINATED STRIP SHINGLE WITH MULTIPLE EXTENDED SHADOW-PRODUCING TABS OF VARIABLE WIDTH AND LENGTH
Filed May 13, 1970 8 Sheets-Sheet 1

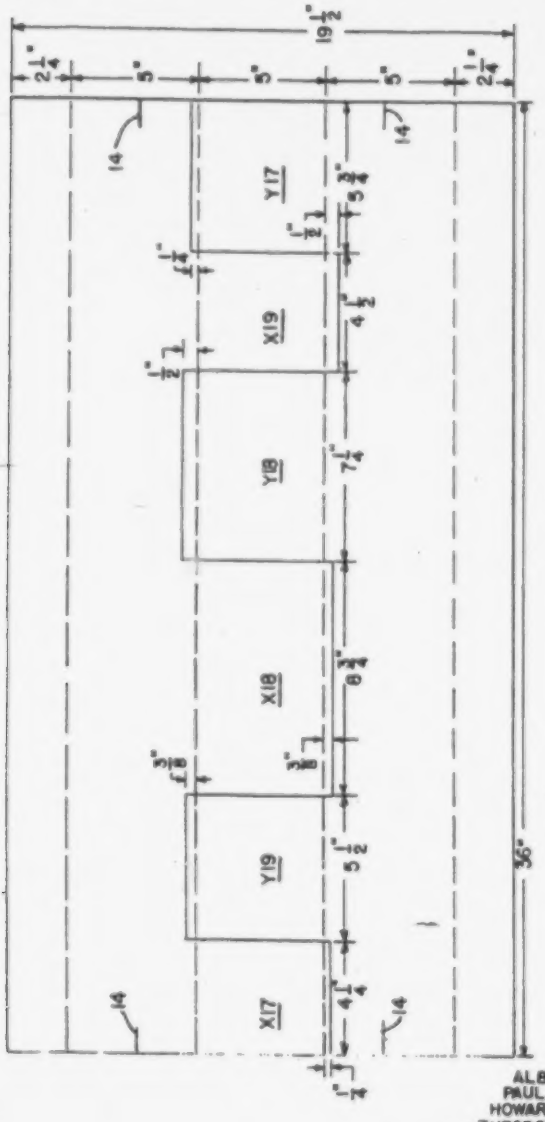


FIG. 1

INVENTORS
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THEODORE R. MAUGEL
BY Melvill, Strasser, Foster and Hoffman
ATTORNEYS

Oct. 19, 1971 A. R. MORGAN, JR., ET AL 3,613,328
LAMINATED STRIP SHINGLE WITH MULTIPLE EXTENDED SHADOW-PRODUCING TABS OF VARIABLE WIDTH AND LENGTH
Filed May 13, 1970 8 Sheets-Sheet 2

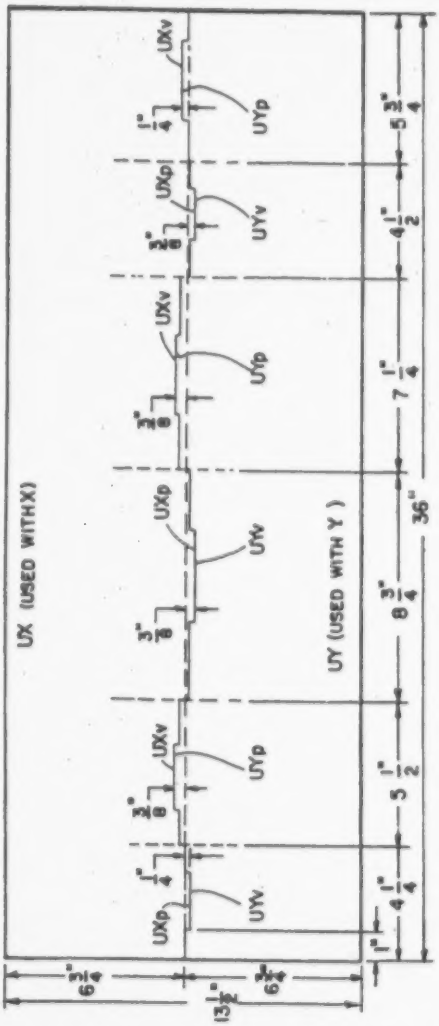

FIG. 3

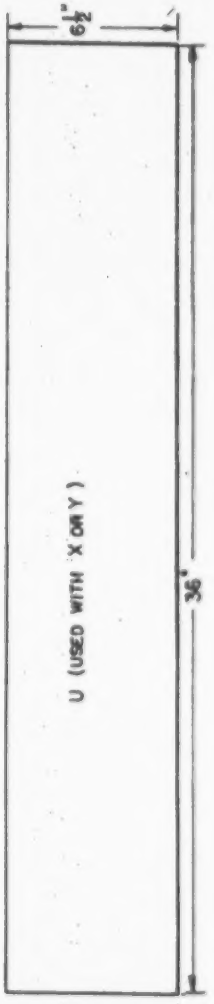

FIG. 2

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LAMINATED STRIP SHINGLE WITH MULTIPLE EXTENDED SHADOW-PRODUCING TABS OF VARIABLE WIDTH AND LENGTH

Filed May 13, 1970 8 Sheets-Sheet 3

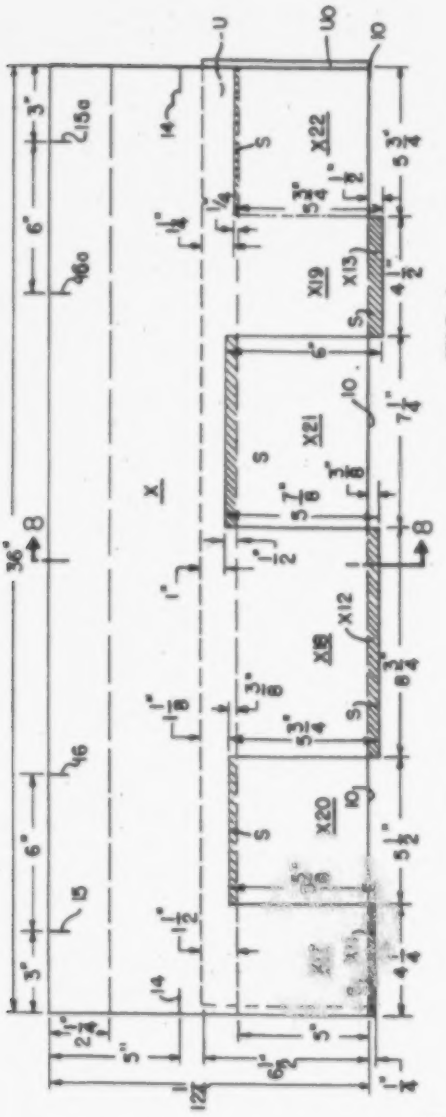

FIG.4

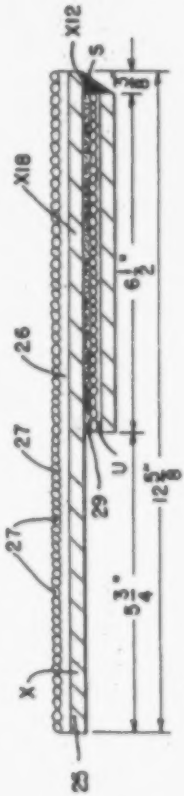

FIG.8

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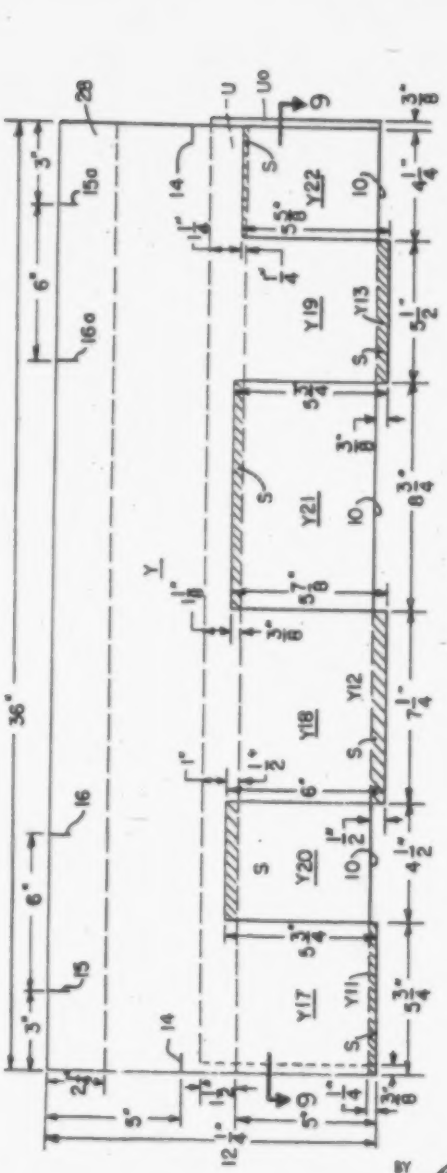
LAMINATED STRIP SHINGLE WITH MULTIPLE EXTENDED SHADOW-PRODUCING TABS OF VARIABLE WIDTH AND LENGTH

Filed May 13, 1970 8 Sheets-Sheet 6



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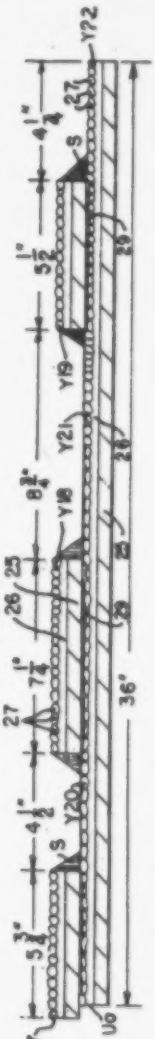

FIG. 9

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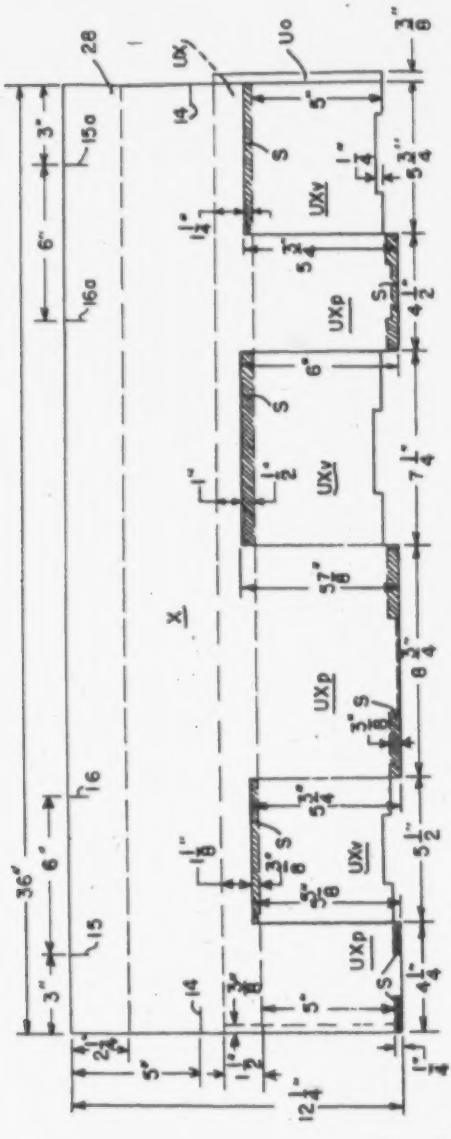
Filed May 13, 1970 8 Sheets-Sheet 5



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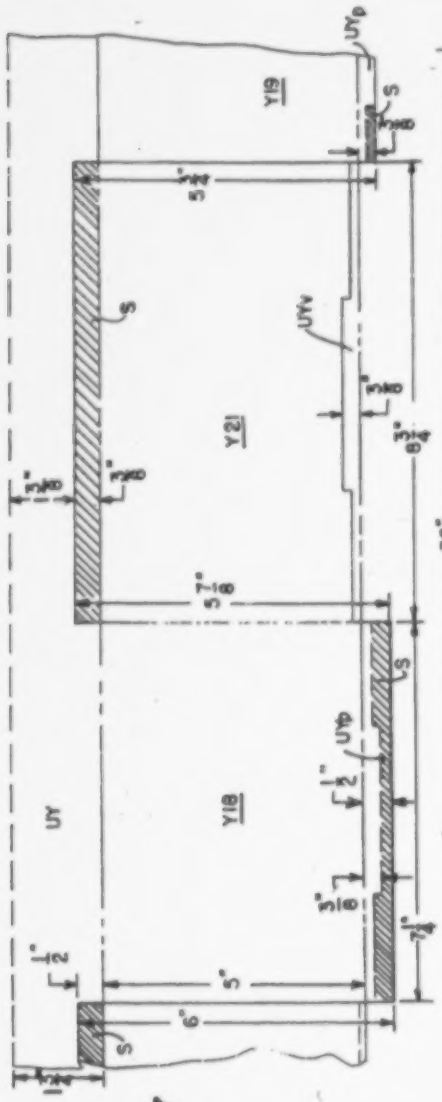

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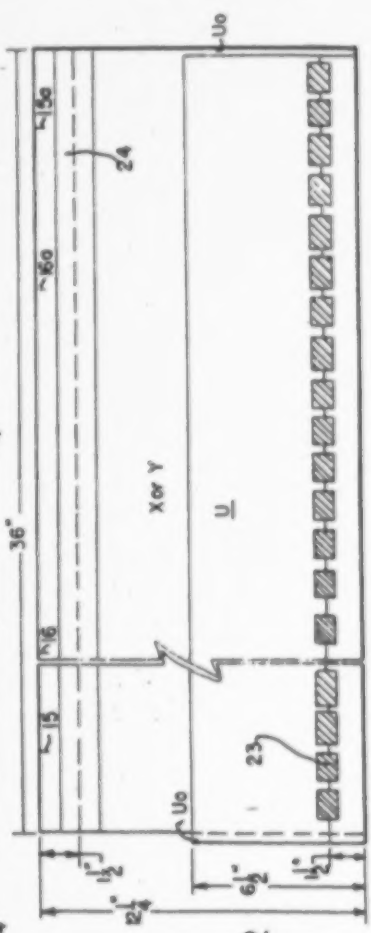

FIG. 12

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Filed May 13, 1970 8 Sheets-Sheet 7

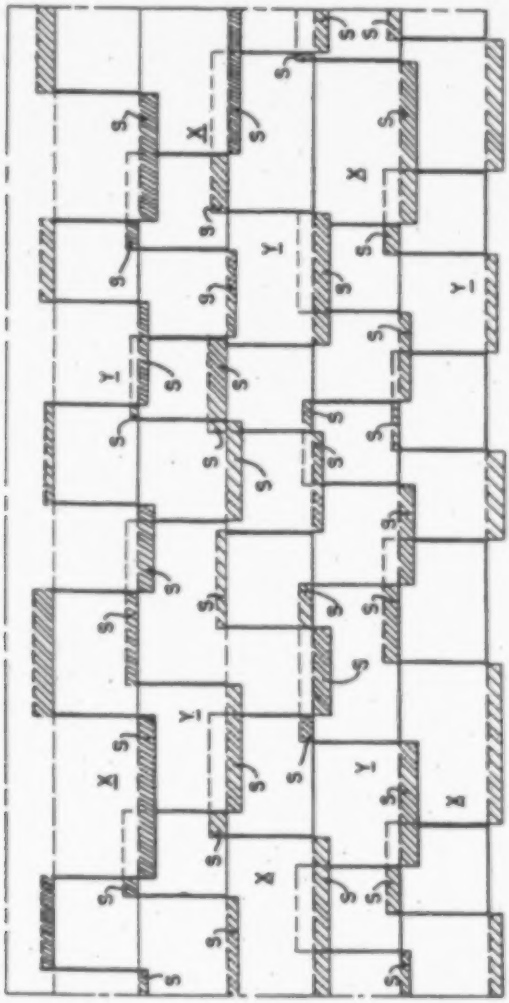

FIG. 10

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LAMINATED STRIP SHINGLE WITH MULTIPLE EXTENDED SHADOW-PRODUCING TABS OF VARIABLE WIDTH AND LENGTH

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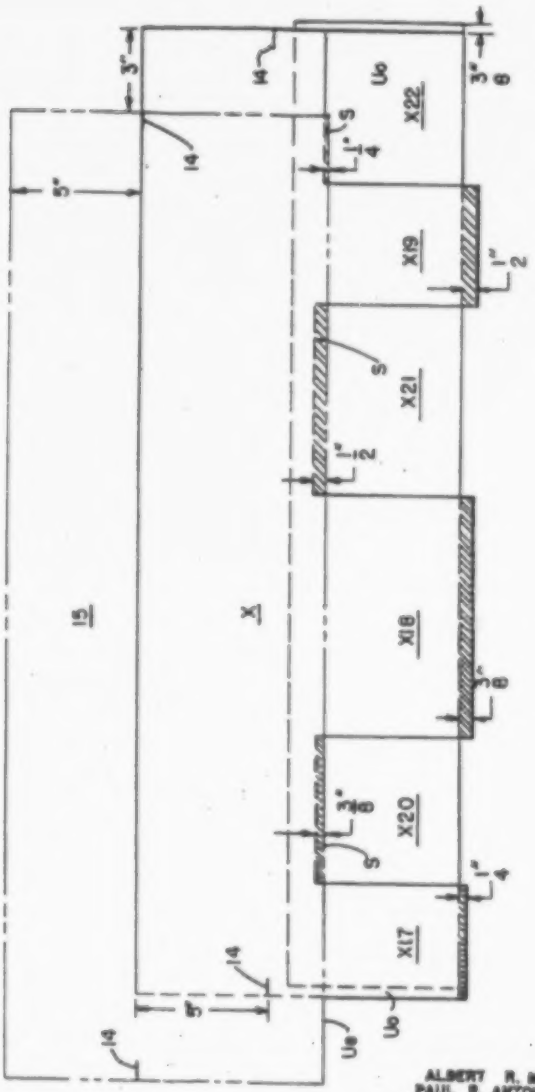

FIG. 11

INVENTORS

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APPENDIX J

US00D344144S

United States Patent [19]

Weaver et al.

[11] **Patent Number: Des. 344,144**

[45] **Date of Patent: ** Feb. 8, 1994**

[54] **LAMINATED SHINGLE**

[75] Inventors: **Casimir P. Weaver, Northport, Ala.; Marti Kilk, Richardson, Tex.; William J. Schaltz, St. Charles, Ill.**

[73] Assignee: **Elk Corporation of Dallas, Dallas, Tex.**

[**] Term: **14 Years**

[21] Appl. No.: **762,857**

[22] Filed: **Sep. 18, 1991**

[52] U.S. Cl. D25/139

[58] Field of Search 52/518, 524, 528, 529, 52/533, 536; D25/139-141

[56] **References Cited**

U.S. PATENT DOCUMENTS

D. 209,027	7/1990	Noone et al. .	
1,834,370	2/1932	Overbury .	
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2,174,098	9/1939	Stein .	
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2,233,652	9/1941	Riter .	
2,302,183	11/1942	Burns .	
2,347,250	4/1944	Burnett .	
3,347,631	4/1966	Lovsaas	52/518
3,484,267	12/1969	Sadler, III	52/518
3,903,340	9/1975	Shepherd .	
4,301,633	11/1981	Neumann .	

OTHER PUBLICATIONS

1982 Sweet's Catalog File, Products for Light Residential Construction, 7.7/Ic, p. 2, Shingle, and p. 4, The Woodland Roof Shingles.

Roofs Catalog by the Flintkote Company, Jul. 29, 1929, p. 20, State-Tone Shingles, illustration at top center.

Primary Examiner—A. Hugo Word

Assistant Examiner—Doris Clark

Attorney, Agent, or Firm—Baker & Botts

[57] **CLAIM**

The ornamental design for laminated shingle, as shown and described.

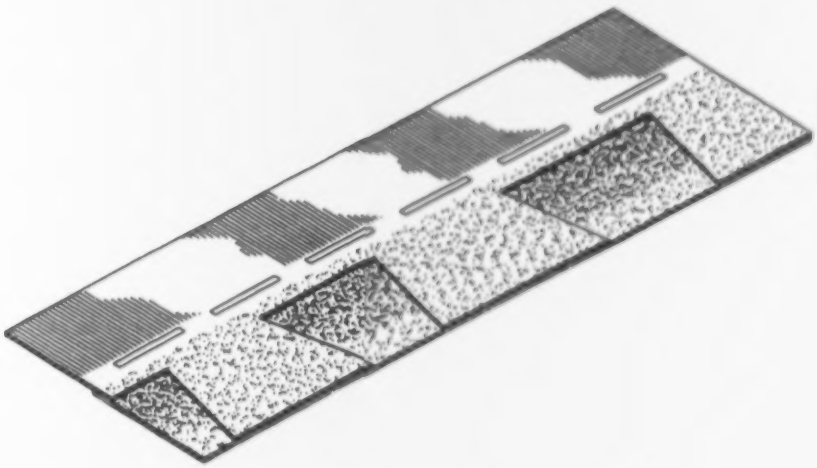
DESCRIPTION

FIG. 1 is a perspective view of a single laminated shingle incorporating our design, with the back view being plain and unadorned;

FIG. 2 is a top plan view of our design;

FIG. 3 is a front elevational view of our design; and,

FIG. 4 is a left side view of our design, the right side being a mirror image.



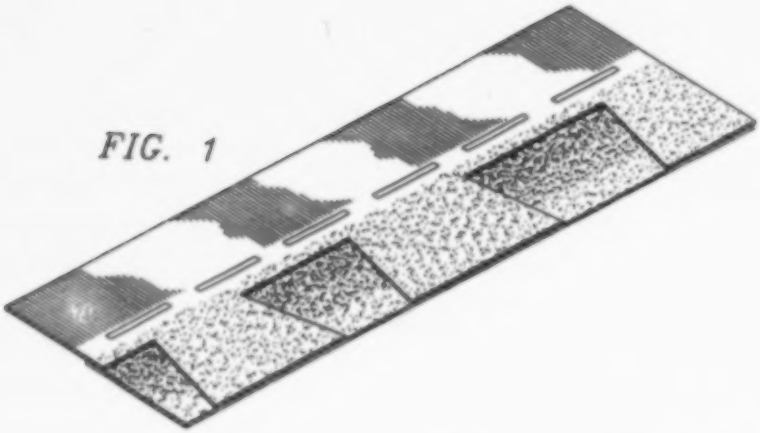


FIG. 1

FIG. 4

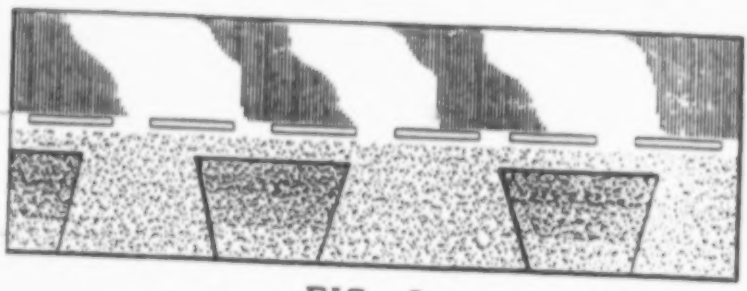


FIG. 2

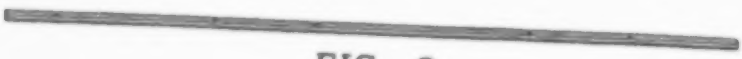


FIG. 3

APPENDIX K

Manual of Patent Examining Procedure

1503 Elements of a Design Patent Application

A design patent application has essentially the elements required of an application for a utility patent filed under 35 U.S.C. 101 (see Chapter 600). However, unlike the latter, a preamble still remains a requirement in a design patent application, and the arrangement of the specification is as specified in 37 CFR 1.154.

A claim in a specific form is a necessary element of a design patent application See MPEP § 1503.01.

A drawing is an essential element of a design patent application. See MPEP § 1503.02 for requirements for drawing.

1503.01 Specification and Claim [R-2]

37 CFR 1.153. Title, description and claim, oath or declaration.

(a) The title of the design must designate the particular article. No description, other than a reference to the drawing, is ordinarily required. The claim shall be in formal terms to the ornamental design for the article (specifying name) as shown, or as shown and described. More than one claim is neither required nor permitted.

(b) The oath or declaration required of the applicant must comply with § 1.63.

37 CFR 1.154. Arrangement of specification.

The following order of arrangement should be observed in framing design specifications:

(a) Preamble, stating name of the applicant and title of the design.
(b) Description of the figure or figures of the drawing.
(c) Description, if any.
(d) Claim.
(e) Signed oath or declaration (See § 1.153(b)).

¶ *15.05 Design Patent Application Arrangement*

The following order of arrangement should be observed in framing design patent applications:
(a) Preamble, stating the name of the applicant and the title of the design.
(b) Description of the figure or figures of the drawings.
(c) Description, if any.
(d) Claim.
(e) Signed oath or declaration (See 37 C.F.R. 1.153(b)).

PREAMBLE

The preamble must state the name of the applicant and the title of the design (37 CFR 1.153-1.154).

The title of the design identifies the article in which the design is embodied by the name generally known and used by the public. A title descriptive of the actual article aids the examiner in developing a complete field of search of the prior art and aids in the proper assignment of new applications to the appropriate class, subclass, and patent examiner, and the proper classification of the patent upon allowance of the application. It also aids the public in understanding the nature and use of the article embodying the design after the patent has been published. For example, a broad title such as "Adapter Ring" provides little clue as to the nature and intended use of the article embodying the design. Thus, applicants are encouraged to provide a specific and descriptive title.

Following are examples of preferred and non-preferred titles:

Preferred Title:	Rather than:
Stove	Heating Device
Vacuum Bottle	Bottle
Microwave Oven	Cooking Appliance
Alarm for an Automobile	Electronic Device

Since 37 CFR 1.153 requires that the title must designate the particular article, and since the particular article is defined by the claim, it follows that the language of the title and claim must correspond. When the language of the title and claim do not correspond, the title should be objected to under 37 CFR 1.153 as not corresponding to the language of the claim.

However, it is emphasized that, under the second paragraph of 35 U.S.C. 112, the claim defines "the subject matter *which the applicant regards* as his invention" (emphasis added). Thus, the examiner should afford the applicant substantial latitude in the language of the title/claim. The examiner should

only require amendment of the title/claim if the language is clearly misdescriptive, inaccurate, or unclear (i.e., the language would result in a rejection of the claim under 35 U.S.C. 112, second paragraph; see MPEP §*>1593,93<).

Any amendment to the language of the title must also be made in both the title and the claim. It is preferable (but not required) that the amended language also be incorporated into the figure description. However, it is not necessary to submit a new oath or declaration merely to obtain correspondence in terminology between the title, claim, and the oath or declaration.

¶ *15.05.1 Title of Design Invention*

The title of an article claimed in a design patent must correspond to the name of the article shown in solid lines in the drawings.

¶ *15.59 Amend Title*

For [1**], the title [2] amended throughout the application, original oath or declaration excepted, to read: [3].

Examiner Note:

>1. In bracket 1, insert reason.

2.< In bracket 2, insert "must be" or "has been."

***

1504.03 Nonobviousness

***

II. PRIMA FACIE OBVIOUSNESS

Once the factual inquiries mandated under *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), have been made, the examiner must determine whether they support a conclusion of *prima facie* obviousness. To establish *prima facie* obviousness, all the claim limitations must be taught or suggested by the prior art.

In determining *prima facie* obviousness, the proper standard is whether the design would have been obvious to a designer or ordinary skill with the claimed type of article. *In re Nalbandian*, 661 F.2d 1214, 211 USPQ 782 (CCPA 1981).

As a whole, a design must be compared with something in existence, and not something brought into existence by selecting and combining features from prior art references. *In re Jennings*, 182 F.2d 207, 86 USPQ 68 (CCPA 1950). The "something in existence" referred to in *Jennings* has been defined as "...a reference... the design characteristics of which are basically the same as the claimed design..." *In re Rosen*, 673 F.2d 388, 391, 213 USPQ 347, 350 (CCPA 1982) (the primary reference did "...not give the same visual impression..." as the

design claimed but had a "...different overall appearance and aesthetic appeal...".) Hence, it is clear that "design characteristics" means overall visual appearance. This definition of "design characteristics" is reinforced in the decision of *In re Harvey*, 12 F.3d 1061, 1063, 29 USPQ2d 1206, 1208 (Fed. Cir. 1993), and is supported by the earlier decisions of *In re Yardley*, 493 F.2d 1389, 181 USPQ 331, 334 (CCPA 1974) and *In re Leslie*, 547 F.2d 116, 192 USPQ 427, 431 (CCPA 1977). Specifically, in the *Yardley* decision, it was stated that "[t]he basic consideration in determining the patentability of designs over prior art is similarity of appearance." 493 F.2d at 1392-93, 181 USPQ at 334. Therefore, in order to support a holding of obviousness, a basic reference must be more than a design concept; it must have an appearance substantially the same as the claimed design. *In re Harvey*, 12 F.3d 1061, 29 USPQ2d 1206 (Fed. Cir. 1993). Absent such a reference, no holding of obviousness under 35 U.S.C. 103(a) can be made, whether based on a single reference alone or in view of modifications suggested by secondary prior art.